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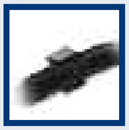
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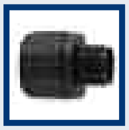
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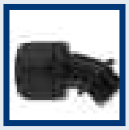
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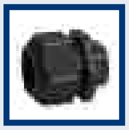
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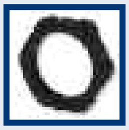
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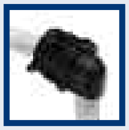
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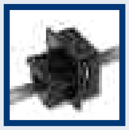
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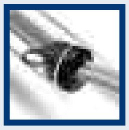
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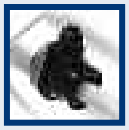
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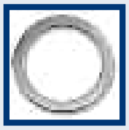
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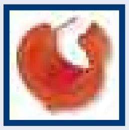
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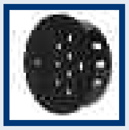
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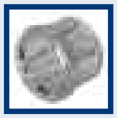
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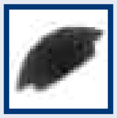
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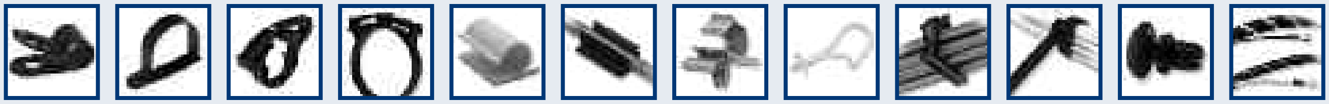
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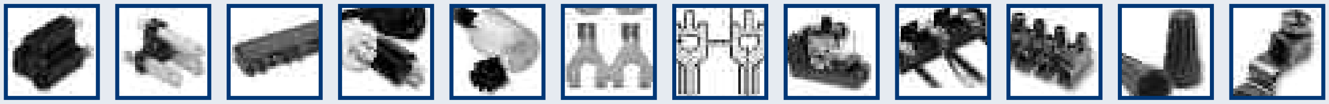
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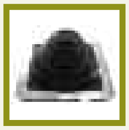
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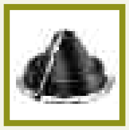
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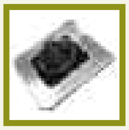
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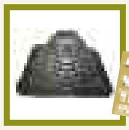
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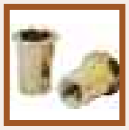
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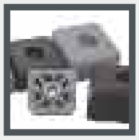
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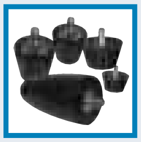
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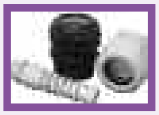
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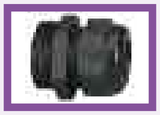
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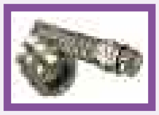

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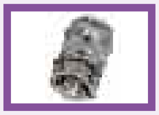

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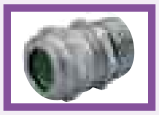

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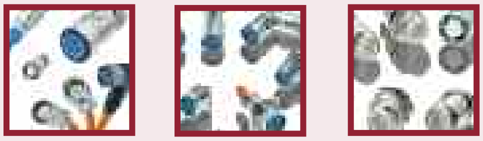

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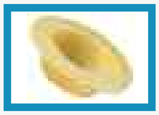
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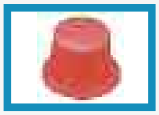
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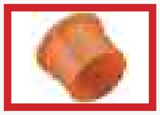
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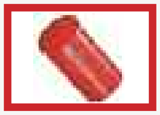
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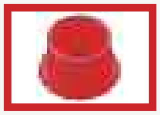
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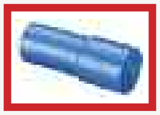
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Diesel Fuel Injector Cap
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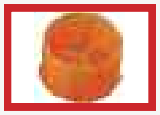
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Caps - Non Threaded
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MJS Series - Tear-Tab Caps for Metric Threads
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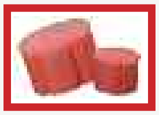
Caps - Non Threaded
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Caps - Non Threaded
TUV Series - Flexible Tear-Tab Caps
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Caps - Non Threaded
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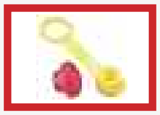
Caps - Non Threaded
GC Series - Grease Caps
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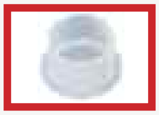
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AN Series - Vinyl Hex Caps
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VFE Series - Vinyl Caps with Flat Ergonomic Pull-Tab
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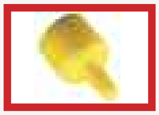
EZ Series - Flexible Vinyl Caps with Pull-Tab for Easy Removal
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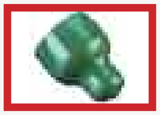
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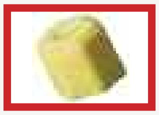
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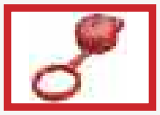
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DC Series - UN/UNS Caps
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CD Series - Threaded Plastic Caps for Flared JIC Fittings
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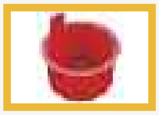
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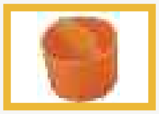
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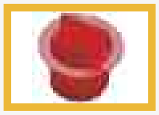
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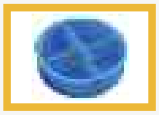
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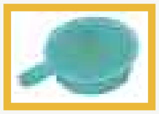
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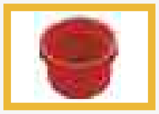
PDI Series - Threaded Plastic Plugs for Inverted Flared Fittings
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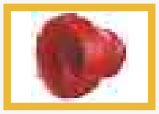
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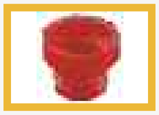
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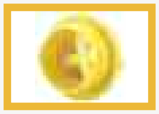
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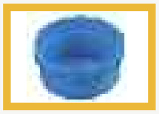
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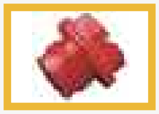
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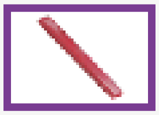
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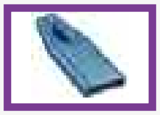
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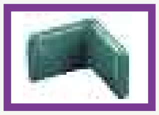
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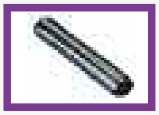
15-50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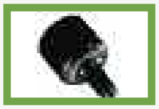
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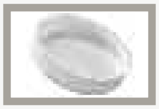
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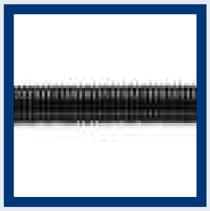

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ESTCO
Liquid Tight Flexible Conduit & Fittings

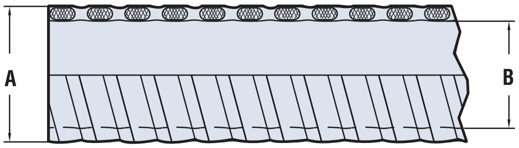
Heyco-Flex™ I Liquid Tight Conduit

Flexible, Nonmetallic Liquid Tight Electrical Conduit

- 3/8″ thru 2″ trade sizes.
- Use with nylon Heyco-Flex Connectors; Straight, Snap-in, or Sweep.
- May also be used with Heyco's Metallic Fittings for Liquid Tight Conduit Straight-Thru and Liquid Tight Conduit 90° Sweep
- Resists corrosion, abrasion, oil, water, acid, metal shavings, and rough environments.
- Resists abuse, pull, and crushing.
- Temperature ratings: 80°C (176°F) DRY 70°C (158°F) OIL Resistance 60°C (140°F) WET locations
- Passes submersion test of 70 psi.
- Voltage rating: 600V
- Mounting brackets are available.
- Smooth inside for easier wire pulling; no hazardous sharp edges or burrs; will not damage conductors.
- Lightweight and lower installed cost.
- Integral rigid and flexible PVC construction.
- Suitable for indoor/outdoor use:
  - HVAC Equipment
  - Machine Tools
  - Marine Equipment
  - Motors and Controls
  - Printing Equipment
  - Pumps
  - Refrigeration Equipment
- Approved for direct burial.
- **Order Part No. H-8340**, VF-28 Cutting Tool, for cutting Heyco-Flex conduit and tubing cleanly and evenly.

TRADE SIZE	PART NO. GREY	DESCRIPTION	PART DIMENSIONS A Outside Diameter in.	mm.	B Inside Diameter in.	mm.	STANDARD COIL LENGTH ft/coil
3/8	**H-8430**	HF1 3/8	.700	17,8	.494	12,5	100
1/2	**H-8431**	HF1 1/2	.830	21,1	.632	16,1	100
3/4	**H-8432**	HF1 3/4	1.040	26,4	.830	21,1	100
1	**H-8433**	HF1 1	1.303	33,1	1.054	26,8	100
1-1/4	**H-8434**	HF1 1-1/4	1.645	41,8	1.395	35,4	100
1-1/2	**H-8435**	HF1 1-1/2	1.883	47,8	1.588	40,3	50
2	**H-8436**	HF1 2	2.358	59,9	2.033	51,6	50

Standard color gray. Consult ESTCO for black and other colors.
Consult Heyco for "Cut to Length" Availability.



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

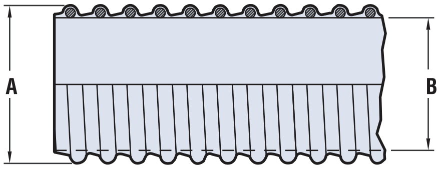
Material	**PVC**
Certifications	**Listed under Underwriters' Laboratories File E121096** **Certified by Canadian Standards Association File LL233010**
Flammability Rating	**VW1**

Heyco-Flex™ II Liquid Tight Tubing

Flexible, Nonmetallic Liquid Tight Electrical Tubing

TRADE SIZE	PART NO. BLACK	DESCRIPTION	PART DIMENSIONS A Outside Diameter in.	mm.	B Inside Diameter in.	mm.	STANDARD COIL LENGTH ft/coil
1/4	**H-8449**	HF2 1/4	.568	14,4	.395	10,0	100
3/8	**H-8450**	HF2 3/8	.700	17,8	.494	12,5	100
1/2	**H-8451**	HF2 1/2	.830	21,1	.632	16,1	100
3/4	**H-8452**	HF2 3/4	1.040	26,4	.830	21,1	100
1	**H-8453**	HF2 1	1.303	33,1	1.054	26,8	100
1-1/4	**H-8454**	HF2 1-1/4	1.645	41,8	1.395	35,4	100
1-1/2	**H-8455**	HF2 1-1/2	1.883	47,8	1.588	40,3	50
2	**H-8456**	HF2 2	2.358	59,9	2.033	51,6	50

Standard color black.
Consult Heyco for “Cut to Length” Availability.

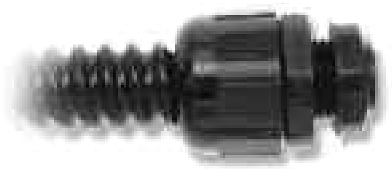


- 1/4″ thru 2″ trade sizes.
- Use with nylon Heyco-Flex Connectors: Straight, Snap-in, or Sweep.
- Resists corrosion, oil, and water.
- Maximum flexibility; can be used in extremely tight quarters.
- Temperature rating 70°C (158°F).
- Smooth inside for easier wire pulling.
- Lightweight and lower installed cost.
- Integral rigid and flexible PVC construction.
- Suitable for use in high vibration or flexing applications:
  - Automotive Equipment
  - Computers and Peripherals
  - Fiber Optics
  - Lab Equipment
  - Lasers
  - Office Equipment
  - Processing Control and Monitoring Equipment
  - Robotics
  - White Goods
- Passes submersion test of 70 psi.
- Mounting brackets are available.
- **Order Part No. H-8340**, VF-28 Cutting Tool, for cutting Heyco-Flex tubing and conduit cleanly and evenly.

Material	**PVC**
Certifications	**Recognized under the Component Program of Underwriters’ Laboratories File E121095** **Certified by Canadian Standards Association File LL233010**
Flammability Rating	**VW1**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511



Heyco-Flex™ Liquid Tight Conduit Fittings Straight-Thru, NPT Hubs

For Flexible, Nonmetallic Liquid Tight Conduit and Tubing

- Multiple sizes for use with Heyco-Flex Conduit and Tubing. See pages 1-1 and 1-2.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- No disassembly required. Instead, the installer simply pushes the conduit or tubing onto the ferrule, then tightens the domed sealing nut. This completed assembly can then be secured in the panel by the locknut or into an NPT threaded hole.
- No threading of the conduit or tubing is required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Complete conduit/connector system is reusable. Conduit will not wind tight onto the connector during assembly and can be easily removed by pulling while turning in a clockwise direction.
- Use of a sealing washer may be required for wet locations. See page 1-13.
- Suitable for indoor/outdoor use; for original equipment manufacturers or field installers.
- Protection class IP 68 up to 70 psi (5 bar) water pressure.
- Black connectors up to 1” provided with nylon locknut, packed separately. Larger than 1” provided with O-ring and metal locknut.
- Gray connectors provided with assembled O-ring and metal locknuts.
- See page 1-11 and 1-12 for locknuts.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT									
	Black	Grey			A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thickness		E Wrenching Flats	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	**H-8400**	**H-8401**	HFC 3/8	1/2” NPT	†.875	22,2	1.330	33,8	.630	16,0	.250	6,3	1.328	33,7
1/2	**H-8402**	**H-8403**	HFC 1/2											
3/4	**H-8404**	**H-8405**	HFC 3/4	3/4” NPT	1.109	28,1	1.410	35,8	.630	16,0	.250	6,3	1.562	39,6
1	**H-8406**	**H-8407**	HFC 1	1” NPT	1.375	34,9	1.470	37,3	.780	19,8	.250	6,3	1.812	46,0
1-1/4	**H-8638**	**H-8639**	HFC 1-1/4	1-1/4” NPT	1.734	44,0	1.375	34,9	.685	17,4	.250	6,3	2.150	54,6
1-1/2	**H-8640**	**H-8641**	HFC 1-1/2	1-1/2” NPT	1.984	50,4	1.500	38,1	.810	20,6	.275	7,0	2.450	62,2
2	**H-8642**	**H-8643**	HFC 2	2” NPT	2.469	62,7	1.750	44,4	.850	21,6	.312	7,9	2.980	75,6

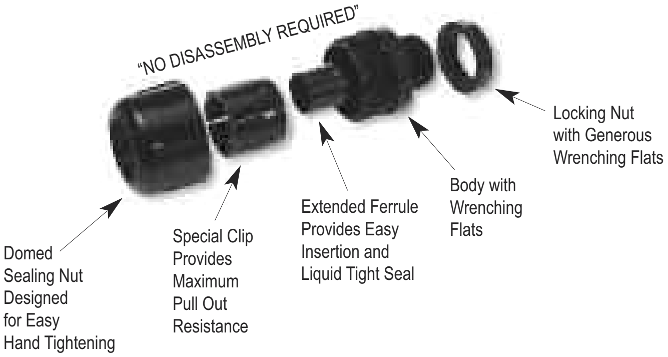
Standard colors black or gray.

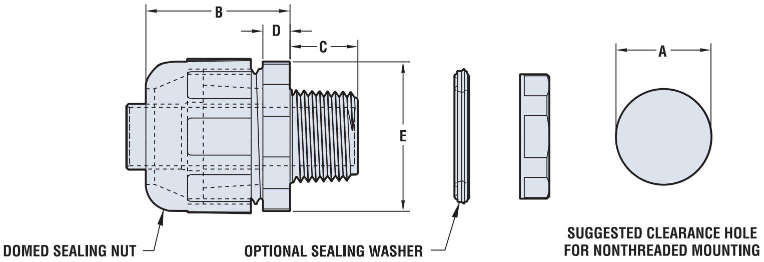
† Fittings used to attach two different conduit sizes to the same size hole.

“PG” Threaded Hub for 1/4˝ Heyco-Flex II Tubing

1/4	**H-8398**	–	HFC 1/4-PG7	PG 7	.492	12,5	1.131	28,7	.449	11,4	.209	5,3	1.001	25,4

Standard color black


“NO DISASSEMBLY REQUIRED”
Locking Nut with Generous Wrenching Flats
Body with Wrenching Flats
Extended Ferrule Provides Easy Insertion and Liquid Tight Seal
Special Clip Provides Maximum Pull Out Resistance
Domed Sealing Nut Designed for Easy Hand Tightening


B
D
C
E
A
DOMED SEALING NUT
OPTIONAL SEALING WASHER
SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Quick Specs

Material	**6/6 Nylon**
Certifications	Ⓤ **Listed under Underwriters’ Laboratories File E28430** **Certified by Canadian Standards Association File LL84579 and LR81067**
Flammability Rating	**94V-2**

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

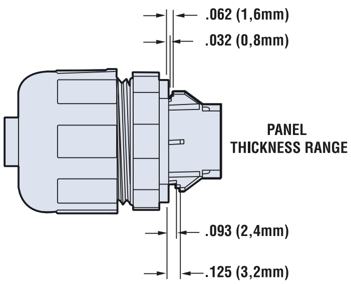
Heyco-Flex™ Liquid Tight Conduit Fittings Straight-Thru, Snap-In Hubs

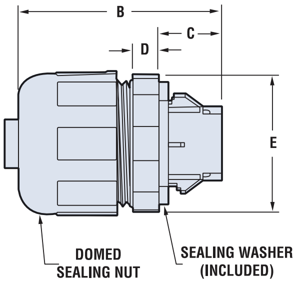
For Flexible, Nonmetallic Liquid Tight Conduit and Tubing

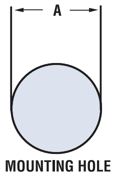
FITS CONDUIT/ TUBING TRADE SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS A Mounting Hole Dia. in.		B Max. O.A. Length in.		C Body Length in.		D Wrenching Nut Thk. in.		E Wrenching Flats in.	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1/4	**H-8382**	HFC 1/4-S	.500	12,7	1.500	38,1	.445	11,3	.219	5,6	.875	22,2
3/8	**H-8384**	HFC 3/8-S	.875	22,2	2.000	50,8	.625	15,9	.250	6,3	1.328	33,7
1/2	**H-8386**	HFC 1/2-S										
3/4	**H-8388**	HFC 3/4-S	1.090	27,7	2.031	51,6	.625	15,9	.250	6,3	1.562	39,7
1	**H-8390**	HFC 1-S	1.375	34,9	2.250	57,1	.781	19,8	.250	6,3	1.812	46,0

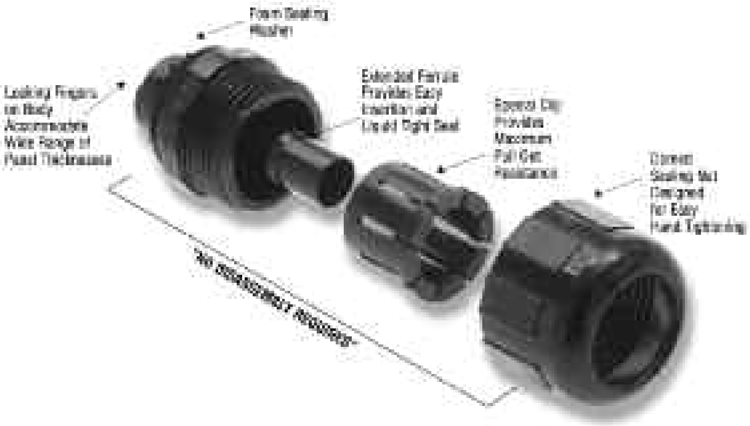
Standard color black.

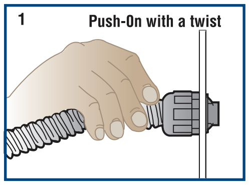
- Multiple sizes for use with Heyco-Flex Conduit and Tubing. See pages 1-1 and 1-2.
- Assembly friendly! The installer simply pushes the conduit or tubing onto the ferrule, then tightens the domed sealing nut. This completed assembly can then be snapped into the panel with fingertip pressure.
- No threading of the conduit or tubing required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Complete conduit/fitting system is reusable. Conduit will not wind tight onto the connector during assembly and can be easily removed by pulling while turning in a clockwise direction.
- Suitable for indoor/outdoor use; for original equipment manufacturers or field installers.
- Resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification or testing.
- Protection class IP 68 up to 70 psi (5 bar) water pressure.

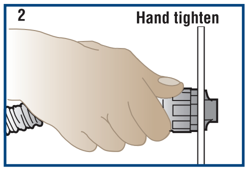

.062 (1,6mm)
.032 (0,8mm)
PANEL THICKNESS RANGE
.093 (2,4mm)
.125 (3,2mm)


B
D
C
E
DOMED SEALING NUT
SEALING WASHER (INCLUDED)


A
MOUNTING HOLE


Foam Sealing Washer
Locking Fingers on Body Accommodate Wide Range of Panel Thicknesses
Extended Ferrule Provides Easy Insertion and Liquid Tight Seal
Spread Clip Provides Maximum Pull Out Resistance
Domed Sealing Nut Designed for Easy Hand Tightening
"NO DISASSEMBLY REQUIRED"


1
Push-On with a twist


2
Hand tighten

Material	6/6 Nylon
Certifications	Ⓤⓛ Listed under Underwriters' Laboratories File E28430 Certified by Canadian Standards Association File LL84579 and LR81067
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

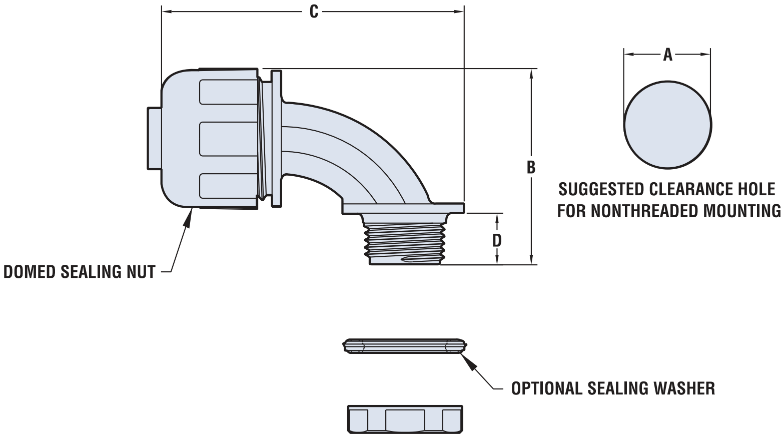
Heyco-Flex™ Liquid Tight Conduit Fittings 90° Sweep, NPT Hubs

For Flexible, Nonmetallic Liquid Tight Conduit and Tubing

- Multiple sizes for use with Heyco-Flex Conduit and Tubing. See pages 1-1 and 1-2.
- Smooth internal surfaces for easier wire installation around corner angles.
- Resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- No disassembly required. Instead, the installer simply pushes the conduit or tubing onto the ferrule, then tightens the domed sealing nut. This completed assembly can then be secured in the panel by the locknut or into an NPT threaded hole.
- No threading of the conduit or tubing is required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Complete conduit/connector system is reusable. Conduit will not wind tight onto the connector during assembly and can be easily removed by pulling while turning in a clockwise direction.
- • Suitable for indoor/outdoor use; for original equipment manufacturers or field installers.
- Lower installed cost.
- Black connectors up to 1" provided with nylon locknut, packed separately. Larger than 1" provided with O-ring and metal locknut.
- Gray connectors provided with assembled O-ring and metal locknut.
- Use of a sealing washer may be required for wet locations. See page 1-13.
- See page 1-11 and 1-12 for locknuts.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
					A Clearance Hole		B Max. O.A. Height		C Max. O.A. Length		D Thread Length	
	Black	Grey			in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	**H-8423**	**H-8424**	HFC 3/8-90R	1/2" NPT	.875	22,2	1982	50,3	2.912	73,9	.520	13,2
1/2	**H-8425**	**H-8426**	HFC 1/2-90R									
3/4	**H-8427**	**H-8428**	HFC 3/4-90R	3/4" NPT	1.109	28,1	2293	58,2	3.172	80,5	.520	13,2
1	**H-8412**	**H-8413**	HFC 1-90R	1" NPT	1.375	34,9	2.833	71,9	3.964	100,6	.690	17,5
1-1/4	**H-8652**	**H-8653**	HFC 1-1/4-90R	1-1/4" NPT	1.734	44,0	3.950	100,3	4.575	116,1	.710	18,0
1-1/2	**H-8654**	**H-8655**	HFC 1-1/2-90R	1-1/2" NPT	1.984	50,4	4.460	113,2	4.900	124,4	.800	20,3
2	**H-8656**	**H-8657**	HFC 2-90R	2" NPT	2.469	62,7	4.900	124,4	5.500	139,6	.840	21,3

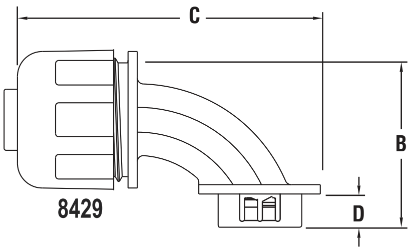
Standard colors black or gray.



"Snap-In" Hub for 1/2" Heyco-Flex Conduit and Tubing

1/2	**H-8429**	–	HFC 1/2-90R-S	N/A	.875	22,2	1.702	43,2	2.912	73,9	.299	7,6

Standard color black



Quick Specs

Material	6/6 Nylon
Certifications	Ⓤ Listed under Underwriters' Laboratories File E28430 Ⓢ Certified by Canadian Standards Association, File LL84579 and LR81067
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)
IP Rating	IP 68 up to 70 psi (5 bar) water pressure

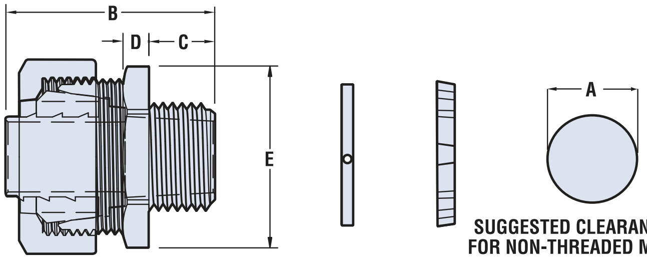
IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco-Flex™ Metallic Liquid Tight Conduit Fittings Straight-Thru, NPT Hubs

For use with Nonmetallic Heyco-Flex™ I Electrical Conduit

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS BODY AND SEALING UNIT									
			A Clearance Hole		B Max. O.A. Length		C Body Length		D Wrenching Nut Thk.		E Wrenching Flats	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1/2	**H-9794**	HFC-Z 1/2	.890	22,6	1.350	34,3	.486	12,3	.161	4,1	1.185	30,1
3/4	**H-9795**	HFC-Z 3/4	1.109	28,1	1.370	34,8	.495	12,6	.185	4,7	1.500	38,1

- Suitable for outside, inside, and industrial uses including transformer connections, air conditioning, and heating.
- Suitable for use in both wet and dry location.
- Provides smooth connection, no sharp edges to strip wire.
- Cost effective die-cast zinc construction provides durability and resists rough environments.
- Supplied with locknut and plastic sealing ring.
- Fits the most common sizes of nonmetallic liquid tight conduit.
- For use with Heyco-FlexTM I Liquid Tight Conduit. See Page 1-1.

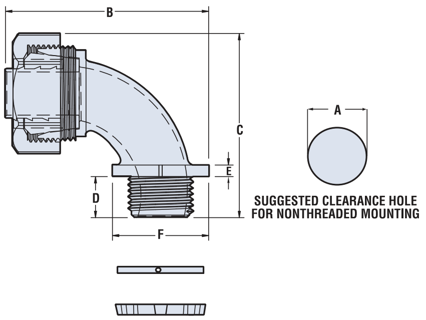


SUGGESTED CLEARANCE HOLE FOR NON-THREADED MOUNTING

Heyco-Flex™ Metallic Liquid Tight Conduit Fittings 90° Sweep, NPT Hubs

For use with Nonmetallic Heyco-Flex™ I Electrical Conduit

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS BODY AND SEALING UNIT											
			A Clearance Hole		B Max. O.A. Length		C Body Length		D Wrenching Nut Thk.		E Wrenching Flats		F Wrenching Flats	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1/2	**H-9796**	HFC-Z 1/2-90	.890	22,6	2.346	59,6	2.118	53,8	.515	13,1	.105	2,9	1.135	28,8
3/4	**H-9797**	HFC-Z 3/4-90	1.109	28,1	2.697	68,5	2.409	61,2	.508	12,9	.095	2,4	1.362	34,6



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Material	Die cast zinc
Certifications	Ⓤ Listed under UL File E103541
Ingress Protection	Liquid tight when used with Heyco-FlexTM I electrical conduit

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

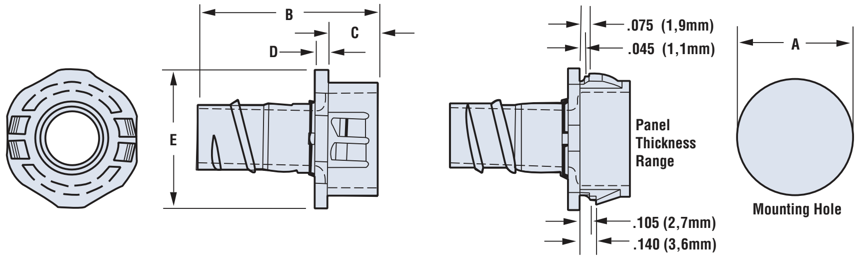
Heyco-Flex™ “Quick Twist” Conduit Fittings Straight-Thru, Snap-In Hubs

For use with Heyco-Flex™ II Tubing

- Snap-in Fittings are UL approved for use with Heyco-FlexTM II tubing. See page 1-2.
- One-piece solution with smooth internal surfaces provides for easier wire routing, protection, and installation.
- All nylon construction is resistant to salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- Easy, permanent assembly: the installer twists the tubing over the connector ferrule, until the tubing clicks into place. It’s that easy!
- No tools needed for installation.
- Unique locking fingers accommodate various panel thicknesses.
- Suitable for a wide array of electrical applications:
  - Commercial and Industrial HVAC Systems
  - Motorized Equipment
  - Enclosed Power Sources
  - Garage Door Openers
  - Major Appliances
- Finishing collars to neaten rough cut tubing ends.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS									
	Black	Grey		A Mounting Hole Dia.		B Overall Length		C Body Length		D Wrenching Nut Thk		E Wrenching Flats	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1/4	**H-8515**	**H-8516**	HFC 1/4-S-twist	.540	13,7	1.330	33,8	.344	8,7	.090	2,3	.750	19,0
3/8	**H-8485**	**H-8486**	HFC 3/8-S-twist	.875	22,2	1.376	35,0	.391	9,9	.090	2,3	1.000	25,4
1/2	**H-8490**	**H-8491**	HFC 1/2-S-twist	.875	22,2	1.376	35,0	.391	9,9	.090	2,3	1.000	25,4
3/4	**H-8495**	**H-8496**	HFC 3/4-S-twist	1.093	27,8	1.495	38,0	.391	9,9	.090	2,3	1.250	31,8

Standard colors black and gray. Consult ESTCO for other colors.



Heyco-Flex “Quick Twist” Finishing Collars

For use with Heyco-Flex™ I and II Conduit Fittings

FITS CONDUIT/ TRADE SIZE	PART NO.		DESCRIPTION
	Black	Grey	
3/8	**H-8474**	**H-8482**	HFC TWIST 3/8 COLLAR
1/2	**H-8475**	**H-8483**	HFC TWIST 1/2 COLLAR
3/4	**H-8476**	**H-8484**	HFC TWIST 3/4 COLLAR

Standard colors black and gray. Consult Heyco for other colors.
(Not available in 1/4˝).

Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters’ Laboratories File E121095**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

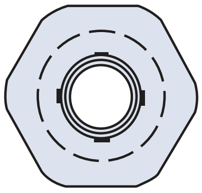
ISO 9001:2000 Certified
CERTIFICATE # 08-511

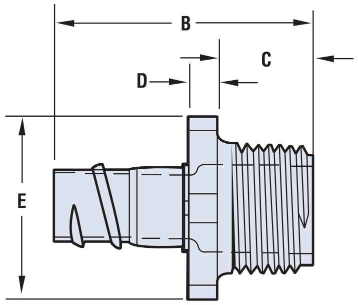
Heyco-Flex™ "Quick Twist" Liquid Tight Conduit Fittings Straight-Thru, NPT Hubs

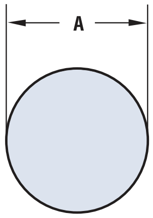
For use with Heyco-Flex™ I and II Conduit and Tubing

FITS CONDUIT/ TUBING TRADE SIZE	PART NO. Black	PART NO. Grey	DESCRIPTION	PART DIMENSIONS A Clearance Hole in.	A Clearance Hole mm.	B Max. O.A. Length in.	B Max. O.A. Length mm.	C Thread Length in.	C Thread Length mm.	D Wrenching Nut in.	D Wrenching Nut mm.	E Wrenching Flats in.	E Wrenching Flats mm.
1/4	**H-8517**	**H-8518**	*HFC 1/4 NPT-twist	.540	13,7	1.559	39,6	.465	11,8	.200	5,1	.750	19,0
3/8	**H-8487**	**H-8488**	HFC 3/8 NPT-twist	.875	22,2	1.720	43,7	.625	15,9	.200	5,1	1.180	30,0
1/2	**H-8493**	**H-8494**	HFC 1/2 NPT-twist	.875	22,2	1.720	43,7	.625	15,9	.200	5,1	1.180	30,0
3/4	**H-8497**	**H-8498**	HFC 3/4 NPT-twist	1.109	28,2	1.840	46,7	.625	15,9	.200	5,1	1.370	34,8

Standard colors black and gray. Consult Heyco for other colors.
UL Listed under Underwriters' Laboratories File E28430.
*RU Recognized under the Component Program of Underwriters' Laboratories File E121095.







SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

- NPT threaded fittings are UL approved for use with Heyco-Flex I & II conduit and tubing. See pages 1-1 and 1-2.
- One-piece solution with smooth internal surfaces provides for easier wire routing, protection, and installation.
- All nylon construction is resistant to salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- Easy, permanent assembly: the installer twists the tubing over the connector ferrule, until the tubing clicks into place. It's that easy!
- No tools needed for installation.
- Unique locking fingers accommodate various panel thicknesses.
- Suitable for a wide array of electrical applications:
  - Commercial and Industrial HVAC Systems
  - Motorized Equipment
  - Enclosed Power Sources
  - Garage Door Openers
  - Major Appliances
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- **Locknuts not included.** To order metal or nylon locknuts separately, see pages 1-11 and 1-12.
- Finishing collars to neaten rough cut tubing ends. See page 1-7.

Material	6/6 Nylon
Certifications	See UL and RU Listed File Numbers under charts
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)
Ingress Protection	NPT Threaded style is liquid tight. Consult Heyco for details.

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

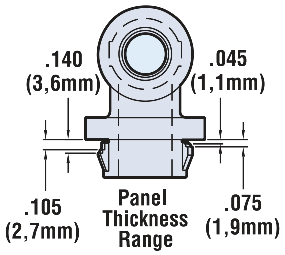
Heyco-Flex™ "Quick Twist" Conduit Fittings 90° Sweep, Snap-In Hubs

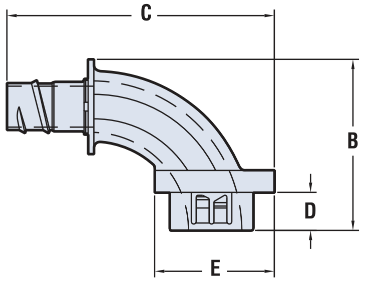
For use with Heyco-Flex™ II Tubing

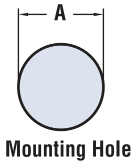
- Snap-in Fittings are UL approved for use with Heyco-FlexTM II tubing. See page 1-2.
- One-piece solution with smooth internal surfaces provides for easier wire routing, protection, and installation.
- All nylon construction is resistant to salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- Easy, permanent assembly: the installer twists the tubing over the connector ferrule, until the tubing clicks into place. It's that easy.
- No tools needed for installation.
- Unique locking fingers accommodate various panel thicknesses.
- Suitable for a wide array of electrical applications:
  - Commercial and Industrial HVAC Systems
  - Motorized Equipment
  - Enclosed Power Sources
  - Garage Door Openers
  - Major Appliances
- Finishing collars to neaten rough cut tubing ends. See page 1-7.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS									
	Black	Grey		A Mounting Hole Dia.		B Max O.A. Height		C Max O.A. Length		D Body Length		E Flange Dia.	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	**H-8500**	**H-8501**	HFC 3/8-S-90-twist	.875	22,2	1.754	44,6	2.749	69,8	.390	9,9	1.230	31,2
1/2	**H-8505**	**H-8506**	HFC 1/2-S-90-twist	.875	22,2	1.754	44,6	2.749	69,8	.390	9,9	1.230	31,2
3/4	**H-8510**	**H-8511**	HFC 3/4-S-90-twist	1.093	27,8	1.965	50,0	3.081	78,3	.390	9,9	1.500	38,1

Standard colors black and gray. Consult ESTCO for other colors







Quick Specs

Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E121095
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

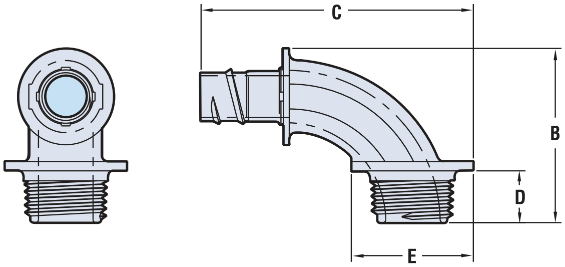
ISO 9001:2000 Certified
CERTIFICATE # 08-511

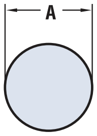
Heyco-Flex™ "Quick Twist" Liquid Tight Conduit Fittings 90° Sweep, NPT Hubs

For use with Heyco-Flex™ I and II Conduit and Tubing

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT									
	Black	Grey			A Clearance Hole		B Max. O.A. Length		C Max O.A. Length		D Thread Length		E Flange Dia.	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	**H-8502**	**H-8503**	HFC 3/8-NPT-90-twist	3/8-NPT	.875	22,2	1.754	44,6	2.749	69,8	.521	13,2	1.230	31,2
1/2	**H-8507**	**H-8508**	HFC 1/2-NPT-90-twist	1/2-NPT	.875	22,2	1.754	44,6	2.749	69,8	.521	13,2	1.230	31,2
3/4	**H-8512**	**H-8513**	HFC 3/4-NPT-90-twist	3/4-NPT	1.109	30,2	2.105	53,5	3.081	78,3	.530	13,5	1.500	38,1

Standard colors black and gray. Consult Heyco for other colors.





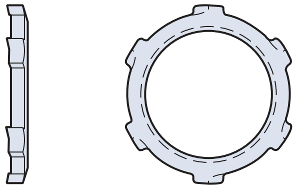
SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

- NPT threaded fittings are UL approved for use with Heyco-Flex I & II conduit and tubing. See pages 1-1 and 1-2.
- One-piece solution with smooth internal surfaces provides for easier wire routing, protection, and installation.
- All nylon construction is resistant to salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- Easy, permanent assembly: the installer twists the tubing over the connector ferrule, until the tubing clicks into place. It's that easy!
- No tools needed for installation.
- Unique locking fingers accommodate various panel thicknesses.
- Suitable for a wide array of electrical applications:
  - Commercial and Industrial HVAC Systems
  - Motorized Equipment
  - Enclosed Power Sources
  - Garage Door Openers
  - Major Appliances
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- **Locknuts not included.** To order metal or nylon locknuts separately, see pages 1-11 and 1-12.
- Finishing collars to neaten rough cut tubing ends. See page 1-7.

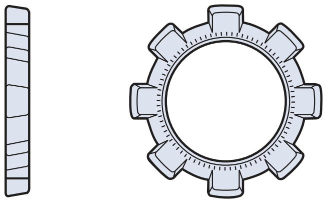
Material	6/6 Nylon
Certifications	Listed under Underwriters' Laboratories File E28430
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)
Ingress Protection	NPT Threaded style is liquid tight. Consult Heyco for details.

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

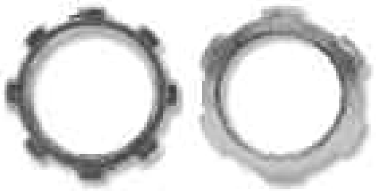


Stamped Steel Nut



Zinc Die-cast Nut

Heyco® Metal Locknuts

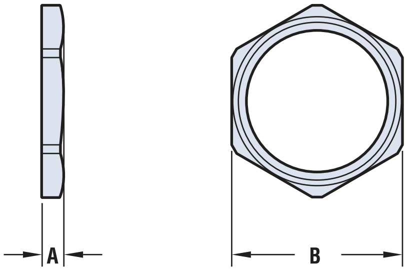


NPT Thread Locknuts
Straight NPS Threads for use with NPT Threaded Fittings

TYPE	ZINC DIE-CAST		ZINC DIE-CAST	
TRADE SIZE	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
1/2	**H-2250**	LN 1/2	**H-9800**	LN 1/2 DC
3/4	**H-2251**	LN 3/4	**H-9801**	LN 3/4 DC
1	**H-2252**	LN 1	**H-9802**	LN 1 DC
1-1/4	**H-9806**	LN 1-1/4	**H-9803**	LN 1-1/4 DC
1-1/2	**H-9807**	LN 1-1/2	**H-9804**	LN 1-1/2 DC
2	**H-9808**	LN 2	**H-9805**	LN 2 DC

PG Thread Locknuts–Nickel Plated Brass

TYPE TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A Thickness		B Wrenching Flats	
			in.	mm.	in.	mm.
PG 7	**H-2257**	LN PG 7	.110	2,8	.591	15,0
PG 9	**H-2258**	LN PG 9	.110	2,8	.709	18,0
PG 11	**H-2259**	LN PG 11	.118	3,0	.827	21,0
PG 13.5	**H-2260**	LN PG 13	.118	3,0	.906	23,0
PG 16	**H-2261**	LN PG 16	.118	3,0	1.024	26,0
PG 21	**H-2262**	LN PG 21	.138	3,5	1.261	32,0
PG 29	**H-2263**	LN PG 29	.158	4,0	1.615	41,0
PG 36	**H-2268**	LN PG 36	.197	5,0	2.009	51,0
PG 42	**H-2269**	LN PG 42	.197	5,0	2.364	60,0



- For use with Heyco-Flex™ Cordgrips and most electrical fittings.
- Nickel-plated brass finish over brass provides excellent corrosion resistance and durability.
- Metric sizes M6 thru M50 accommodate a wide range of fittings.

Metric Thread Locknuts–Nickel Plated Brass

TYPE TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A Thickness		B Wrenching Flats	
			in.	mm.	in.	mm.
M6	**H-2243**	LN M6	.110	2,8	.354	9,0
M8	**H-2244**	LN M8	.110	2,8	.433	11,0
M10	**H-2245**	LN M10	.110	2,8	.512	13,0
M12	**H-2246**	LN M12	.118	3,0	.591	15,0
M16	**H-2247**	LN M16	.118	3,0	.748	19,0
M20	**H-2248**	LN M20	.138	3,5	.945	24,0
M25	**H-2249**	LN M25	.138	3,5	1.181	30,0
M32	**H-2253**	LN M32	.177	4,5	1.417	36,0
M40	**H-2254**	LN M40	.177	4,5	1.811	46,0
M50	**H-2255**	LN M50	.217	5,5	2.165	55,0

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

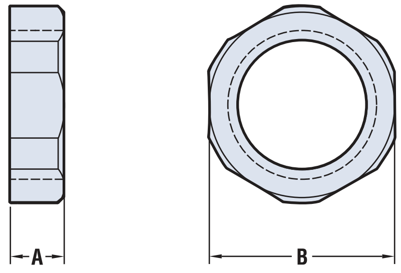
Heyco® Nylon Locknuts

NPT Thread

Straight NPS Threads for use with NPT Threaded Fittings

THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
				A		B	
	Black	Grey		Thickness		Wrenching Flats	
				in.	mm.	in.	mm.
1/4 NPT	**H-M9142**	**H-M9143**	NLN 1/4 NPT	.265	6,7	.748	19,0
3/8 NPT	**H-8461**	**H-8462**	NLN 3/8 NPT	.265	6,7	1.058	26,9
1/2 NPT	**H-8463**	**H-8464**	NLN 1/2 NPT	.265	6,7	1.058	26,9
3/4 NPT	**H-8465**	**H-8466**	NLN 3/4 NPT	.265	6,7	1.312	33,3
1 NPT	**H-8467**	**H-8468**	NLN 1 NPT	.265	6,7	1.605	40,8
1-1/4 NPT	**H-M9144**	**H-M9145**	NLN 1-1/4 NPT	.281	7,1	1.968	50,0
1-1/2 NPT	**H-M9150**	**H-M9151**	NLN 1-1/2 NPT	.320	8,1	2.750	69,9
2 NPT	**H-M9156**	**H-M9157**	NLN 2 NPT	.375	9,5	2.856	72,4

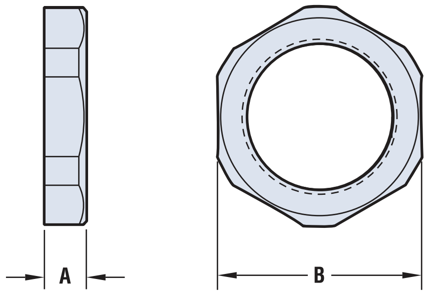
Standard colors black and gray.



PG Thread

THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
				A		B	
	Black	Grey		Thickness		Wrenching Flats	
				in.	mm.	in.	mm.
PG 7	**H-3165**	**H-3166**	NLN PG 7	.218	5,5	.750	19,1
PG 9	**H-3167**	**H-3168**	NLN PG 9	.218	5,5	.859	21,8
PG 11	**H-3169**	**H-3170**	NLN PG 11	.218	5,5	.937	23,8
PG 13.5	**H-3171**	**H-3172**	NLN PG 13.5	.250	6,4	1.062	27,0
PG 16	**H-3173**	**H-3174**	NLN PG 16	.250	6,4	1.171	29,7
PG 21	**H-3175**	**H-3176**	NLN PG 21	.281	7,1	1.406	35,7
PG 29	**H-3177**	**H-3178**	NLN PG 29	.281	7,1	1.812	46,0
PG 36	**H-M9146**	**H-M9147**	NLN PG 36	.281	7,1	2.244	56,9
PG 42	**H-M9152**	**H-M9153**	NLN PG 42	.320	8,1	2.750	69,9
PG 48	**H-M9158**	**H-M9159**	NLN PG 48	.375	9,5	2.850	72,4

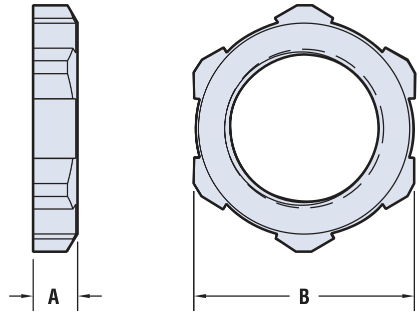
Standard colors black and gray.



Metric Thread

THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
				A		B	
	Black	Grey		Thickness		Wrenching Flats	
				in.	mm.	in.	mm.
M12	**H-M9130**	**H-M9131**	NLN M12	.218	5,5	.750	19,1
M16	**H-M9132**	**H-M9133**	NLN M16	.218	5,5	.870	22,1
M20	**H-M9134**	**H-M9135**	NLN M20	.245	6,2	1.062	27,0
M25	**H-M9136**	**H-M9137**	NLN M25	.278	7,1	1.378	35,0
M32	**H-M9138**	**H-M9139**	NLN M32	.281	7,1	1.614	41,0
M40	**H-M9140**	**H-M9141**	NLN M40	.281	7,1	1.968	50,0
M50	**H-M9148**	**H-M9149**	NLN M50	.320	8,1	2.750	69,9
M63	**H-M9154**	**H-M9155**	NLN M63	.375	9,5	2.850	72,4

Standard colors black and gray.



Material	6/6 Nylon
Flammability Rating	94V-2 Standard–Consult Heyco for VO material
Material Temperature Index	257°F (125°C)–Maximum temperature on the part not exceed 221°F (105°C)

Quick Specs

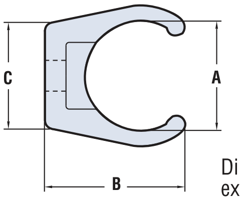
ISO 9001:2000 Certified
CERTIFICATE # 08-511

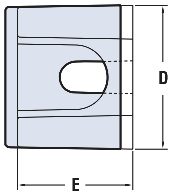
Heyco-Flex™ Mounting Brackets

- For mounting Heyco-FlexTM Conduit or Tubing securely into place, vertically or horizontally. See pages 1-1 and 1-2.
- Only fingertip pressure is required to snap conduit or tubing into bracket.
- Low profile design for space savings and pleasing appearance.
- Recommended distance between brackets at intervals not greater than 3 feet (1m) as required by Article 351-27 of 1996 NEC.
- Use one standard #10 (4-5M) screw for attaching bracket to panel (screw not included).
- Resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS									
	Black	Grey		A Inside Diam.		B Length		C Height		D Outside Diam.		E Width	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	**H-1025**	**H-1026**	HFB 3/8	.664	16,9	.912	23,2	.715	18,2	.903	22,9	.750	19,1
1/2	**H-1027**	**H-1028**	HFB 1/2	.788	20,0	1.074	27,3	.710	18,0	1.056	26,8	.750	19,1
3/4	**H-1029**	**H-1030**	HFB 3/4	1.050	26,7	1.269	32,2	.670	17,0	1.306	33,2	.750	19,1
1	**H-1031**	**H-1032**	HFB 1	1.240	31,5	1.520	38,6	.840	21,3	1.530	38,9	.750	19,1

Standard colors black and gray.





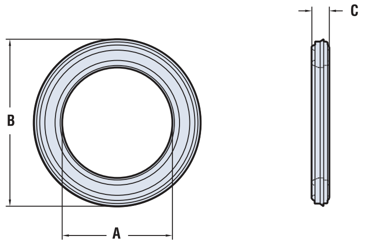
Dimensions excluding draft

Heyco® Sealing Washers

- For use with Heyco-FlexTM fittings.
- Liquid tight, dust tight, and oil tight at enclosure.
- Suitable for wet locations requiring a separate gasket between the box and fitting.
- Also suitable for other panel sealing applications.
- Easy to install since washers seal off on the perimeter, not on the connector threads.
- Special double sealing ridges compensate for minor unevenness at enclosure.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS					
	Black		A Inside Diam.		B Outside Diam.		C Thickness	
			in.	mm.	in.	mm.	in.	mm.
1/4	**H-3258**	SW 1/4	.540	13,7	.796	20,2	.125	3,2
3/8	**H-3259**	SW 3/8	.670	17,0	1.010	25,5	.125	3,2
1/2	**H-3260**	SW 1/2	.820	20,8	1.240	31,5	.125	3,2
3/4	**H-3261**	SW 3/4	1.030	26,2	1.500	38,1	.135	3,4
1	**H-3262**	SW 1	1.281	32,5	1.770	45,0	.175	4,4
1-1/4	**H-3264**	SW 1-1/4	1.662	42,2	2.160	54,8	.160	4,1

Standard color black.



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

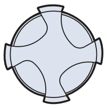
Mounting Brackets		Sealing Washers	
Material	6/6 nylon	Material	Thermoplastic Elastomer
Flammability Rating	94V-2	Flammability Rating	94V-0
Material Temperature Index	257°F (125°C) Max Temp on the part shall not exceed 221°F (105°C)	Material Temperature Index	257°F (125°C) Max Temp on the part shall not exceed 221°F (105°C)

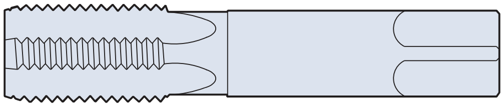
Heyco® PG Thread Taps

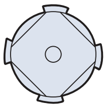
For Steel Conduit Threads per DIN 40430

THREAD TYPE AND SIZE	TAP DRILL DIAMETER mm.	DESCRIPTION	PART NO.		PART DIMENSIONS		
			Starting	Finishing	Major	Length	
					Diameter mm.	Overall mm.	Thread mm.
PG 7	11,5	PG-T 7	**H-0150**	**H-0151**	12,5	63,0	20,0
PG 9	14,0	PG-T 9	**H-0153**	**H-0154**	15,2	70,0	20,0
PG 11	17,3	PG-T 11	**H-0156**	**H-0157**	18,6	80,0	22,0
PG 13.5	19,0	PG-T 13.5	**H-0159**	**H-0160**	20,4	80,0	22,0
PG 16	21,3	PG-T 16	**H-0162**	**H-0163**	22,5	80,0	22,0
PG 21	27,0	PG-T 21	**H-0165**	**H-0166**	28,3	90,0	22,0
PG 29	35,5	PG-T 29	**H-0168**	**H-0169**	37,0	110,0	25,0

- Use a starting tap for through-hole applications.
- For blind holes, thread first with a starting tap; finish bottoming the threads with a finishing tap.
- Flank angle 80°
- Made of high-speed steel with ground threads for greater accuracy to assure optimum performance.
- Suitable for cutting alloy steel, bronze and stainless.







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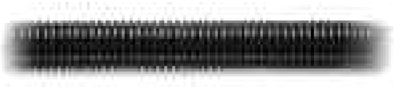
CERTIFICATE # 08-511



Flexicon Nylon Corrugated Conduit / Tubing

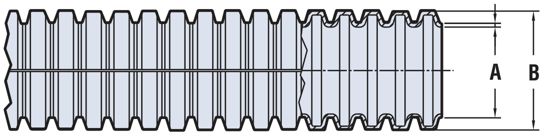
Highly Flexible Polyamide 6 Nylon, Standard Weight

Type FPAS

- 10 mm thru 67 mm nominal sizes.
- Use with nylon Flexicon fittings; Straight, 45° or 90°. See pages 1-17 through 1-23.
- Highly resistant to abrasion, oil, and solvents.
- Temperature range: -40°C to 120°C static (-40°F to 248°F) -20°C to 100°C moving (-4°F to 212°F)
- Highly flexible and high fatigue life.
- High impact strength and recovers if crushed.
- Lightweight and low installed cost.
- UV resistant (black).
- For use with all types of equipment, machinery, pumps, motors, and HVAC equipment.
- Halogen, sulphur, and phosphorus free.
- Highly flame retardant.
- Low fire hazard.
- Low smoke and toxicity.
- See Page 1-24 for mounting clips.
- See Pages 1-25, 1-26, and 1-27 for technical specifications.
- Consult factory for light and/or heavy weight nylon 6 corrugated conduit.
- Consult factory for Type FPR Extra Low Fire Hazard (V0) Nylon 6 corrugated conduit.
- Consult factory for gray or other colors as well as nonstandard lengths.

NOMINAL SIZE	PITCH	PART NO.	DESCRIPTION	PART DIMENSIONS							
				Inside Bend Radius		A Inside Diam.		B Outside Diam.		Roll Length	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.
10 mm	F	***H-F8400**	*FPAS 10/BL	.591	15,0	.248	6,3	.394	10,0	164	50m
13 mm	F	***H-F8402**	*FPAS 13/BL	.984	25,0	.386	9,8	.512	13,0	164	50m
16 mm	F	**H-F8404**	FPAS 16/BL	1.575	40,0	.465	11,8	.622	15,8	164	50m
21 mm	F	**H-F8406**	FPAS 21/BL	1.722	45,0	.657	16,7	.835	21,2	164	50m
28 mm	F	**H-F8410**	FPAS 28/BL	1.969	50,0	.898	22,8	1.122	28,5	164	50m
34 mm	C	**H-F8414**	FPAS 34/BL	2.362	60,0	1.106	28,1	1.358	34,5	164	50m
42 mm	C	**H-F8416**	FPAS 42/BL	2.756	70,0	1.398	35,5	1.673	42,5	82	25m
54 mm	C	**H-F8418**	FPAS 54/BL	3.150	80,0	1.858	47,2	2.146	54,5	82	25m
67 mm	C	**H-F8420**	FPAS 67/BL	5.118	130,0	2.216	56,3	2.646	67,2	33	10m

Standard color black.
PITCH: Indicates frequency and separation of corrugations. F=Fine or closely spaced and C=Coarse or less closely spaced, fittings work equally well with either fine or coarse pitch conduit.
*Not UL approved.



LOW FIRE HAZARD

Quick Specs

Material	Polyamide 6 Nylon (PA6)
Certifications	Recognized under Underwriters' Laboratories File E229161 CE Approved as per EN50086
Flammability Rating	94V-2 and Halogen Free
IP Rating	IP 66 with FPA Fittings Per EN60529/IP 66, 67&68 with FPAX Fittings
Compression Strength	75 kg/100 mm (165 lbs./4 in.) for 21 mm nominal size
Tensile Strength	40 kg (88 lbs.) for 21 mm nominal size

ISO 9001:2000 Certified
CERTIFICATE # 08-511

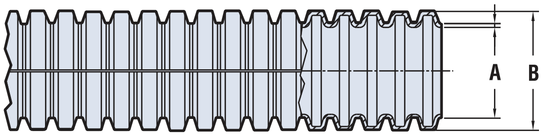
Flexicon Nylon Corrugated Conduit / Tubing

Extremely Flexible Polyamide 12 Nylon, Standard Weight

NOMINAL SIZE	PITCH	PART NO.	DESCRIPTION	PART DIMENSIONS Inside Bend Radius in.	mm.	A Inside Diam. in.	mm.	B Outside Diam. in.	mm.	Roll Length in.	mm.
13mm	F	**H-F8422**	*FPI 13/BL	.984	25,0	.386	9,8	.512	13,0	164	50m
16mm	F	**H-F8424**	FPI 16/BL	1.181	30,0	.465	11,8	.622	15,8	164	50m
21mm	F	**H-F8426**	FPI 21/BL	1.378	35,0	.657	16,7	.835	21,2	164	50m
28mm	C	**H-F8432**	FPI 28/BL	1.772	45,0	.854	21,7	1.122	28,5	164	50m
34mm	C	**H-F8434**	FPI 34/BL	2.165	55,0	1.106	28,1	1.358	34,5	82	25m
42mm	C	**H-F8436**	FPI 42/BL	2.362	60,0	1.398	35,5	1.673	42,5	82	25m
5 mm	C	**H-F8438**	FPI 54/BL	2.756	70,0	1.858	47,2	2.146	54,5	82	25m

Standard color black.
* UL certification pending.

PITCH: Indicates frequency and separation of corrugations. F=Fine or closely spaced and C=Coarse or less closely spaced, fittings work equally well with either fine or coarse pitch conduit.



SELF EXTINGUISHING

Type FPI

- 13 mm thru 54 mm nominal sizes.
- Medium wall construction.
- Use with nylon Flexicon fittings; Straight, 45° or 90°. See pages 1-17 through 1-23.
- Highly resistant to abrasion, oil, and solvents.
- Temperature range: -50°C to 110°C (-58°F to 230°F)
- Highly flexible and exceptional fatigue life.
- High impact strength and recovers if crushed.
- UV resistant (black).
- Particularly suited to Robotics, Automation, and/or continuous flexing.
- Halogen and phosphorus free.
- See Page 1-24 for mounting clips.
- See Pages 1-25, 1-26 and 1-27 for technical specifications.
- Consult factory for heavy weight nylon 12 corrugated conduit.
- Consult factory for Type FPR Extra Low Fire Hazard (V0) Nylon 6 corrugated conduit.
- Consult factory for gray or other colors as well as nonstandard lengths.

Material	Polyamide 12 Nylon (PA12)
Certifications	Recognized under Underwriters' Laboratories File E229161 CE Approved as per EN50086
Flammability Rating	94 HB and Low Smoke, Low Toxicity as well as Halogen and Phosphorus Free
IP Rating	IP 66 with FPA Fittings Per EN60529/IP 66, 67&68 with FPAX Fittings
Compression Strength	45 kg/100 mm (99 lbs./4 in.) for 21 mm nominal size
Tensile Strength	30 kg (66 lbs.) for 21 mm nominal size

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

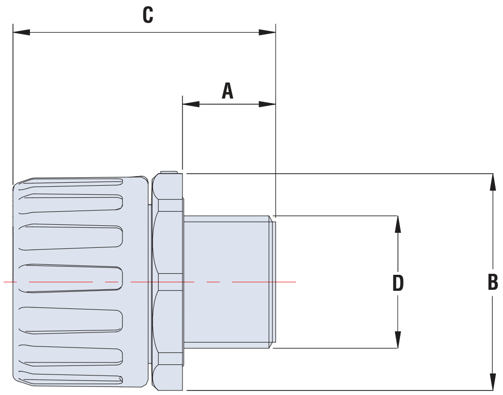
Flexicon Nylon Conduit Fittings Straight-Thru, NPT Hub

For Flexible, Corrugated Nylon Conduit/Tubing

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both fine and/or coarse pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification or testing.
- No threading of the conduit/tubing is required to install.
- **Locknuts not included**, refer to page 1-12 for Nylon Locknuts.
- Suitable for use by all original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Vibration and tamper resistant, but easily removed with a screwdriver.
- Refer to page 1-27 for NPT thread specifications.

FITS CONDUIT NOMINAL SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
	Black	Grey			A Thread Length		B Max. O.A. Length		C Max O.A. Length		D Clearance Hole	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.
16 mm	**H-F8504**	**H-F8505**	FPA 16-038	3/8 NPT	.433	11,0	1.122	28,5	1.457	37,0	.670	17,0
16 mm	**H-F8506**	**H-F8507**	FPA 16-050	1/2 NPT	.551	14,0	1.122	28,5	1.555	39,5	.875	22,2
21 mm	**H-F8510**	**H-F8511**	FPA 21-050	1/2 NPT	.551	14,0	1.260	32,0	1.732	44,0	.875	22,2
28 mm	**H-F8516**	**H-F8517**	FPA 28-075	3/4 NPT	.591	15,0	1.732	44,0	1.969	50,0	1.109	28,2
34 mm	**H-F8520**	**H-F8521**	FPA 34-100	1 NPT	.630	16,0	1.988	50,5	2.087	53,0	1.375	34,9
42 mm	**H-F8522**	**H-F8523**	FPA 42-125	1-1/4 NPT	.630	16,0	2.469	62,7	2.382	60,5	1.734	44,0
42 mm	**H-F8524**	**H-F8525**	FPA 42-150	1-1/2 NPT	.709	18,0	2.469	62,7	2.430	62,5	1.984	50,4
54 mm	**H-F8526**	**H-F8527**	FPA 54-150	1-1/2 NPT	.709	18,0	2.992	76,0	2.638	67,0	1.984	50,4
54 mm	**H-F8528**	**H-F8529**	FPA 54-200	2 NPT	.787	20,0	2.992	76,0	2.717	69,0	2.469	62,7
67 mm	**H-F8530**	**H-F8531**	FPA 67-200	2 NPT	.787	20,0	3.543	90,0	2.894	73,5	2.469	62,7

Standard colors black and gray. Consult ESTCO for other colors.



Quick Specs

Material	Polyamide Nylon 6/6
Certifications	Recognized under Underwriters' Laboratories File E229161 Approved as per EN50086
Flammability Rating	94 V2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free
IP Rating	IP 66 standard as per EN60529 IP 66 IP 66&67&68 available–consult factory and specify FPAX fittings
Temperature Rating	The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

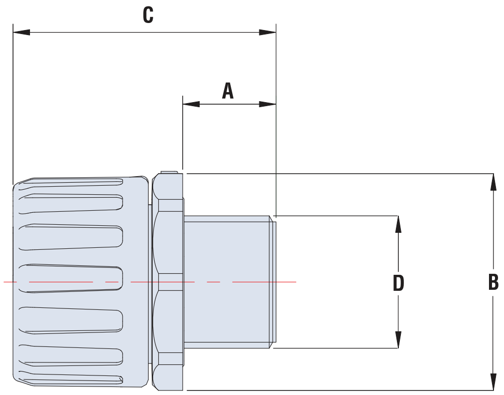
Flexicon Nylon Conduit Fittings Straight-Thru, PG Hub

For Flexible, Corrugated Nylon Conduit/Tubing

FITS CONDUIT NOMINAL SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
					A Thread Length		B Max. O.A. Length		C Max O.A. Length		D Clearance Hole	
	Black	Grey			in.	mm.	in.	mm.	in.	mm.	in.	mm.
10 mm	**H-F8540**	**H-F8541**	*FPA 10-PG7	PG 7	.354	9,0	.748	19,0	1.280	32,5	.492	12,5
13 mm	**H-F8542**	**H-F8543**	*FPA 13-PG9	PG 9	.394	10,0	.925	23,5	1.457	37,0	.599	15,2
16 mm	**H-F8546**	**H-F8547**	FPA 16-PG11	PG 11	.394	10,0	1.122	28,5	1.417	36,0	.733	18,6
16 mm	**H-F8548**	**H-F8549**	FPA 16-PG13	PG 13	.394	10,0	1.122	28,5	1.417	36,0	.804	20,4
21 mm	**H-F8550**	**H-F8551**	FPA 21-PG13	PG 13	.394	10,0	1.260	32,0	1.575	40,0	.804	20,4
21 mm	**H-F8552**	**H-F8553**	FPA 21-PG16	PG 16	.453	11,0	1.260	32,0	1.614	41,0	.886	22,5
28 mm	**H-F8556**	**H-F8557**	FPA 28-PG21	PG 21	.472	12,0	1.732	44,0	1.850	47,0	1.115	28,3
34 mm	**H-F8560**	**H-F8561**	FPA 34-PG29	PG 29	.472	12,0	1.988	50,5	1.929	49,0	1.470	37,3
42 mm	**H-F8562**	**H-F8563**	FPA 42-PG36	PG 36	.472	12,0	2.469	62,7	2.224	56,5	1.850	47,0
54 mm	**H-F8566**	**H-F8567**	FPA 54-PG48	PG 48	.472	12,0	2.992	76,0	2.402	61,0	2.335	59,3

Standard color black. Consult Heyco for other colors.
*Not Ⓤ recognized.

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both fine and/or coarse pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification or testing.
- No threading of the conduit/tubing is required to install.
- **Locknuts not included**, refer to page 1-12 for Nylon Locknuts.
- Suitable for use by all original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Vibration and tamper resistant, but easily removed with a screwdriver.
- Refer to page 1-27 for NPT thread specifications.



Material	**Polyamide Nylon 6/6**
Certifications	**Recognized under Underwriters' Laboratories File E229161** **CE Approved as per EN50086**
Flammability Rating	**94 V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free**
IP Rating	**IP 66 standard as per EN60529 IP 66** **IP 66&67&68 available–consult factory and specify FPAX fittings**
Temperature Rating	**The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

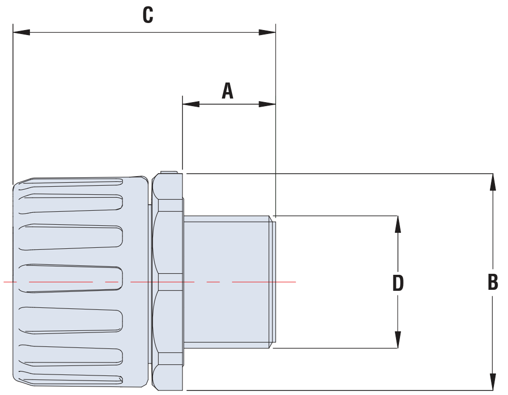
Flexicon Nylon Conduit Fittings Straight-Thru, Metric Hub

For Flexible, Corrugated Nylon Conduit/Tubing

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both coarse and/or fine pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification or testing.
- No threading of the conduit or tubing is required to install.
- **Locknuts INCLUDED**.
- Suitable for use by original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Vibration and tamper resistant, but easily removed with a screwdriver.
- Refer to page 1-27 for metric thread specification.

FITS CONDUIT NOMINAL SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
	Black	Grey			A Thread Length		B Max. O.A. Length		C Max O.A. Length		D Clearance Hole	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.
10 mm	**H-F8570**	**H-F8571**	*FPA 10-M12	M12x1,5	.354	9,0	.748	19,0	1.280	32,5	.473	12,0
13 mm	**H-F8572**	**H-F8573**	*FPA 13-M16	M16x1,5	.453	11,0	.925	23,5	1.496	38,0	.630	16,0
16 mm	**H-F8574**	**H-F8575**	FPA 16-M16	M16x1,5	.453	11,0	1.122	28,5	1.457	37,0	.630	16,0
16 mm	**H-F8576**	**H-F8577**	FPA 16-M20	M20x1,5	.551	14,0	1.122	28,5	1.555	39,5	.787	20,0
21 mm	**H-F8580**	**H-F8581**	FPA 21-M20	M20x1,5	.551	14,0	1.260	32,0	1.732	44,0	.787	20,0
28 mm	**H-F8586**	**H-F8587**	FPA 28-M25	M25x1,5	.591	15,0	1.732	44,0	1.969	50,0	.985	25,0
34 mm	**H-F8590**	**H-F8591**	FPA 34-M32	M32x1,5	.630	16,0	1.988	50,5	2.087	53,0	1.260	32,0
42 mm	**H-F8592**	**H-F8593**	FPA 42-M40	M40x1,5	.630	16,0	2.469	62,7	2.382	60,5	1.575	40,0
42 mm	**H-F8594**	**H-F8595**	FPA 42-M50	M50x1,5	.630	16,0	2.469	62,7	2.382	60,5	1.969	50,0
54 mm	**H-F8596**	**H-F8597**	FPA 54-M50	M50x1,5	.630	16,0	2.992	76,0	2.559	65,0	1.969	50,0
54 mm	**H-F8598**	**H-F8599**	FPA 54-M63	M63x1,5	.630	16,0	2.992	76,0	2.559	65,0	2.480	63,0
67 mm	**H-F8578**	**H-F8579**	FPA 67-M63	M63x1,5	.630	16,0	3.543	90,0	2.736	69,5	2.480	63,0

Standard color black. Consult ESTCO for other colors.
*Not Ⓤ recognized.



Quick Specs

Material	**Polyamide Nylon 6/6**
Certifications	**Recognized under Underwriters' Laboratories File E229161** **Approved as per EN50086**
Flammability Rating	**94V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free**
IP Rating	**IP 66 standard as per EN60529** **IP 66&67&68 available–consult factory and specify FPAX fittings**
Temperature Rating	**The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing**

ISO 9001:2000 Certified
CERTIFICATE # 08-511

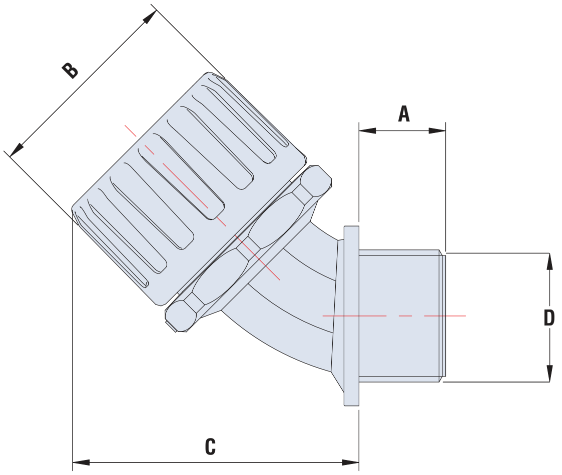
Flexicon Nylon Conduit Fittings
45° Sweep, NPT Hub

For Flexible, Corrugated Nylon Conduit/Tubing

FITS CONDUIT NOMINAL SIZE	PART NO. Black	PART NO. Grey	DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT A Thread Length in.	A Thread Length mm.	B Max. O.A. Length in.	B Max. O.A. Length mm.	C Max O.A. Length in.	C Max O.A. Length mm.	D Clearance Hole in.	D Clearance Hole mm.
16 mm	**H-F8706**	**H-F8707**	FPA 16-050-45	NPT 1/2	.512	13,0	1.122	28,5	1.634	41,5	.875	22,2
21 mm	**H-F8710**	**H-F8711**	FPA 21-050-45	NPT 1/2	.512	13,0	1.260	32,0	1.693	43,0	.875	22,2
28 mm	**H-F8716**	**H-F8717**	FPA 28-075-45	NPT 3/4	.591	15,0	1.732	44,0	2.283	58,0	1.109	28,2
34 mm	**H-F8720**	**H-F8721**	FPA 34-100-45	NPT 1	.630	16,0	1.988	50,5	2.559	65,0	1.375	34,9
42 mm	**H-F8724**	**H-F8725**	FPA 42-150-45	NPT 1-1/2	.669	17,0	2.469	62,7	3.189	81,0	1.984	50,4
54 mm	**H-F8728**	**H-F8729**	FPA 54-150-45	NPT 1-1/2	.669	17,0	2.992	76,0	3.504	89,0	1.984	50,4

Standard color black. Consult ESTCO for other colors.

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both coarse and/or fine pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification and testing.
- No threading of the conduit or tubing is required to install.
- **Locknuts not included**, refer to page 1-12 for Nylon Locknuts.
- Suitable for use by all original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Vibration and tamper resistant, but easily removed with a screwdriver.



Material	Polyamide Nylon 6/6
Certifications	Recognized under Underwriters' Laboratories File E229161 Approved as per EN50086
Flammability Rating	94 V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free
IP Rating	IP 66 standard as per EN60529 IP 66 IP 66&67&68 available–consult factory and specify FPAX fittings
Temperature Rating	The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Flexicon Nylon Conduit Fittings
90° Sweep, NPT Hub

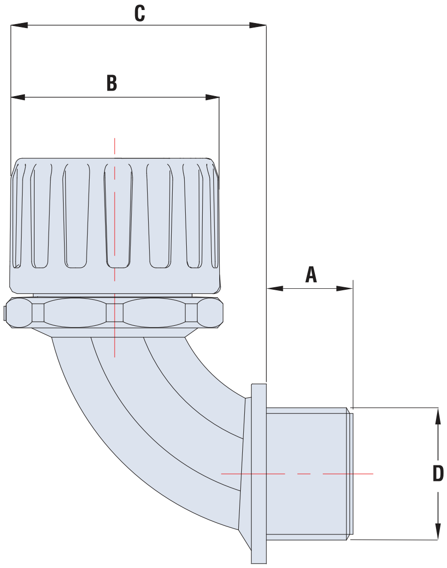
For Flexible, Corrugated Nylon Conduit/Tubing

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both coarse and/or fine pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease and common solvents. This feature is not assessed by UL certification or testing.
- No threading of the conduit or tubing is required to install.
- **Locknuts not included**, refer to page 1-12 for Nylon Locknuts.
- Suitable for use by all original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Vibration and tamper resistant, but easily removed with a screwdriver.

FITS CONDUIT NOMINAL SIZE	PART NO. Black	PART NO. Grey	DESCRIPTION	THREAD SIZE	A Thread Length in.	A mm.	B Max. O.A. Length in.	B mm.	C Max O.A. Length in.	C mm.	D Clearance Hole in.	D mm.
16 mm	**H-F8606**	**H-F8607**	FPA 16-050-90	1/2 NPT	.512	13,0	1.122	28,5	1.476	37,5	.875	22,2
21 mm	**H-F8610**	**H-F8611**	FPA 21-050-90	1/2 NPT	.512	13,0	1.260	32,0	1.555	39,5	.875	22,2
28 mm	**H-F8616**	**H-F8617**	FPA 28-075-90	3/4 NPT	.591	15,0	1.732	44,0	1.988	50,0	1.109	28,2
34 mm	**H-F8620**	**H-F8621**	FPA 34-100-90	1 NPT	.630	16,0	1.988	50,5	2.303	58,5	1.375	34,9
42 mm	**H-F8622**	**H-F8623**	FPA 42-125-90	1-1/4 NPT	.630	16,0	2.469	62,7	3.150	80,0	1.375	34,9
42 mm	**H-F8624**	**H-F8625**	FPA 42-150-90	1-1/2 NPT	.669	17,0	2.469	62,7	3.228	82,0	1.984	50,4
54 mm	**H-F8626**	**H-F8627**	FPA 54-150-90	1-1/2 NPT	.669	17,0	2.992	76,0	3.425	87,0	1.984	50,4
54 mm	**H-F8628**	**H-F8629**	FPA 54-200-90	2 NPT	.728	18,5	2.992	76,0	3.445	87,5	2.469	62,7
67 mm	**H-F8630**	**H-F8631**	FPA 67-200-90	2 NPT	.728	18,5	3.543	90,0	3.740	95,0	2.469	62,7

PART DIMENSIONS BODY AND SEALING UNIT

Standard color black. Consult ESTCO for other colors.



Quick Specs

Material	Polyamide Nylon 6/6
Certifications	Recognized under Underwriters' Laboratories File E229161 CE Approved as per EN50086
Flammability Rating	94V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free
IP Rating	IP 66 standard as per EN60529 IP 66 IP 66&67&68 available–consult factory and specify FPAX fittings
Temperature Rating	The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing

ISO 9001:2000 Certified
CERTIFICATE # 08-511

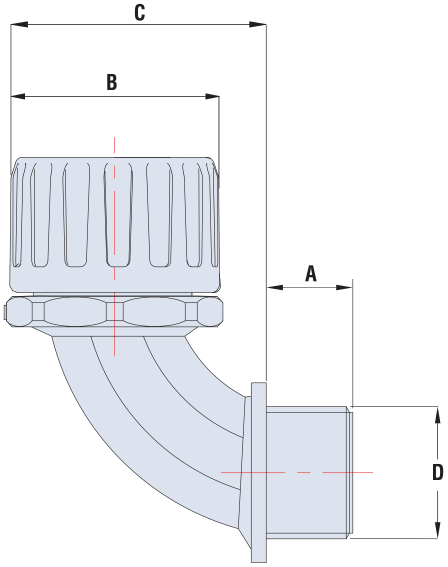
Flexicon Nylon Conduit Fittings
90° Sweep, PG Hub

For Flexible, Corrugated Nylon Conduit/Tubing

FITS CONDUIT NOMINAL SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
					A Thread Length		B Max. O.A. Length		C Max O.A. Length		D Clearance Hole	
	Black	Grey			in.	mm.	in.	mm.	in.	mm.	in.	mm.
10 mm	**H-F8640**	**H-F8641**	FPA 10-PG7-90	*PG 7	.315	8,0	.748	19,0	.945	24,0	.492	12,5
13 mm	**H-F8642**	**H-F8643**	FPA 13-PG9-90	*PG 9	.394	10,0	.925	23,5	1.437	36,5	.599	15,2
16 mm	**H-F8646**	**H-F8647**	FPA 16-PG11-90	PG 11	.394	10,0	1.122	28,5	1.535	39,0	.733	18,6
16 mm	**H-F8648**	**H-F8649**	FPA 16-PG13-90	PG 13	.394	10,0	1.122	28,5	1.614	41,0	.804	20,4
21 mm	**H-F8650**	**H-F8651**	FPA 21-PG13-90	PG 13	.394	10,0	1.266	32,0	1.614	41,0	.804	20,4
21 mm	**H-F8652**	**H-F8653**	FPA 21-PG16-90	PG 16	.453	11,0	1.266	32,0	1.614	41,0	.886	22,5
28 mm	**H-F8656**	**H-F8657**	FPA 28-PG21-90	PG 21	.472	12,0	1.732	44,0	2.094	53,2	1.115	28,3
34 mm	**H-F8660**	**H-F8661**	FPA 34-PG29-90	PG 29	.472	12,0	1.988	50,5	2.488	62,3	1.470	37,3
42 mm	**H-F8662**	**H-F8663**	FPA 42-PG36-90	PG 36	.472	12,0	2.469	62,7	3.358	85,3	1.850	47,0
54 mm	**H-F8666**	**H-F8667**	FPA 54-PG48-90	PG 48	.472	12,0	2.992	76,0	3.831	97,3	2.335	59,3

Standard color black. Consult ESTCO for other colors.
*Not UL recognized.

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both coarse and/or fine pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification.
- No threading of the conduit or tubing is required to install.
- **Locknuts not included**, refer to page 1-12 for Nylon Locknuts.
- Suitable for use by original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Refer to page 1-27 for PG thread specifications.
- Vibration and tamper resistant, but easily removed with a screwdriver.



Material	Polyamide Nylon 6/6
Certifications	Recognized under Underwriters' Laboratories File E229161 CE Approved as per EN50086
Flammability Rating	94 V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free
IP Rating	IP 66 standard as per EN60529 IP 66 IP 66&67&68 available–consult factory and specify FPAX fittings
Temperature Rating	The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing

Quick
Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

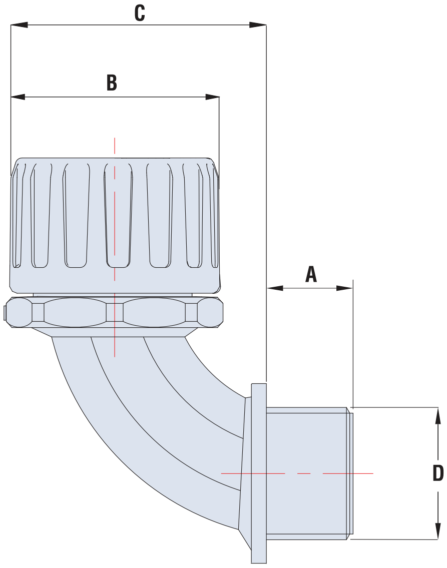
Flexicon Nylon Conduit Fittings 90° Sweep, Metric Hub

For Flexible, Corrugated Nylon Conduit/Tubing

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both coarse and/or fine pitch conduit/tubing.
- Unitary design and assembled shipment allows fast fit.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease and common solvents. This feature is not assessed by UL certification or testing.
- No threading of the conduit or tubing is required to install.
- **Locknuts not included**, refer to page 1-12 for Nylon Locknuts.
- Suitable for use by all original equipment manufacturers.
- Protection class IP 66 per EN 60529 including high pressure water jet from any angle.
- Vibration and tamper resistant, but easily removed with a screwdriver.

FITS CONDUIT NOMINAL SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
	Black	Grey			A Thread Length		B Max. O.A. Length		C Max O.A. Length		D Clearance Hole	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.
10 mm	**H-F8670**	**H-F8671**	FPA 10-M12-90	M12x1,5	.315	8,0	.748	19,0	.945	24,0	.473	12,0
13 mm	**H-F8672**	**H-F8673**	FPA 13-M16-90	M16x1,5	.453	11,5	.925	23,5	.366	34,7	.630	16,0
16 mm	**H-F8674**	**H-F8675**	FPA 16-M16-90	M16x1,5	.453	11,5	1.122	28,5	1.476	37,5	.630	16,0
16 mm	**H-F8676**	**H-F8677**	FPA 16-M20-90	M20x1,5	.512	13,0	1.122	28,5	1.476	37,5	.787	20,0
21 mm	**H-F8680**	**H-F8681**	FPA 21-M20-90	M20x1,5	.512	13,0	1.260	32,0	1.555	39,5	.787	20,0
28 mm	**H-F8686**	**H-F8687**	FPA 28-M25-90	M25x1,5	.591	15,0	1.732	44,0	1.988	50,5	.985	25,0
34 mm	**H-F8690**	**H-F8691**	FPA 34-M32-90	M32x1,5	.630	16,0	1.988	50,5	2.303	58,5	1.260	32,0
42 mm	**H-F8694**	**H-F8695**	FPA 42-M50-90	M50x1,5	.630	16,0	2.469	62,7	3.268	83,0	1.969	50,0
54 mm	**H-F8696**	**H-F8697**	FPA 54-M50-90	M50x1,5	.630	16,0	2.992	76,0	3.465	88,0	1.969	50,0
54 mm	**H-F8698**	**H-F8699**	FPA 54-M63-90	M63x1,5	.630	16,0	2.992	76,0	3.465	88,0	2.480	63,0
67 mm	**H-F8678**	**H-F8679**	FPA 67-M63-90	M63x1,5	.630	16,0	3.543	90,0	3.740	95,0	2.480	59,3

Standard color black. Consult ESTCO for other colors.



Quick Specs

Material	Polyamide Nylon 6/6
Certifications	Recognized under Underwriters' Laboratories File E229161 Approved as per EN50086
Flammability Rating	94V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free
IP Rating	IP 66 standard as per EN60529 IP 66&67&68 available–consult factory and specify FPAX fittings
Temperature Rating	The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing

ISO 9001:2000 Certified
CERTIFICATE # 08-511

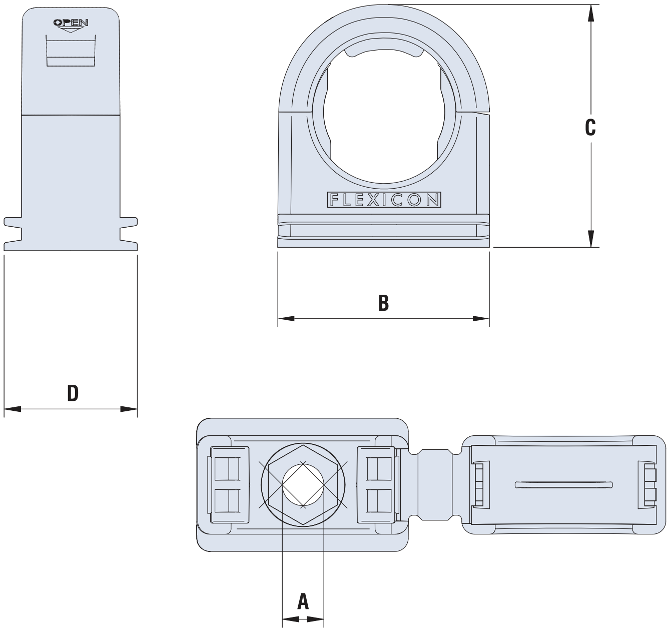
Flexicon Conduit/Tubing Mounting Clips

With Integral Closure

FITS CONDUIT TRADE	PART NO.		DESCRIPTION	PART DIMENSIONS							
	Black	Grey		A Mounting Hole		B Max. Width		C Max O.A. Height		D Max O.A. Thickness	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.
10 mm	**H-F8900**	**H-F8901**	FCL 10	.197	5,0	.894	22,7	1.093	26,4	.787	20,0
13 mm	**H-F8902**	**H-F8903**	FCL 13	.197	5,0	.894	22,7	1.093	26,4	.787	20,0
16 mm	**H-F8904**	**H-F8905**	FCL 16	.205	5,2	1.039	26,4	1.173	29,8	.787	20,0
21 mm	**H-F8906**	**H-F8907**	FCL 21	.244	6,2	1.252	31,8	1.437	36,5	.787	20,0
28 mm	**H-F8908**	**H-F8909**	FCL 28	.244	6,2	1.606	40,8	1.752	44,5	.787	20,0
34 mm	**H-F8910**	**H-F8911**	FCL 34	.244	6,2	1.890	48,0	2.028	51,5	.787	20,0
42 mm	**H-F8912**	**H-F8913**	FCL 42	.244	6,2	2.252	57,2	2.370	60,2	.787	20,0
54 mm	**H-F8914**	**H-F8915**	FCL 54	.244	6,2	2.744	69,7	2.862	72,7	.787	20,0

Standard color black. Consult ESTCO for other colors.

- For use with Flexicon corrugated conduit/tubing. See pages 1-15 and 1-16.
- Suitable for use with both fine and/or coarse pitch conduit/tubing.
- For mounting Flexicon corrugated conduit or tubing securely into
- place, vertically or horizontally.
- Only fingertip pressure is required to snap conduit or tubing into bracket.
- Suitable for use by original equipment manufacturers.
- Low profile design for space savings and pleasing appearance.
- Recommended distance between brackets at intervals not greater than 3 feet (914 mm) as required by Article 351-27 of 1996 NEC.
- Use one standard #10 (4-5M) screw for attaching bracket to panel or chassis (screw not included).
- Resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification or testing.
- Can be easily opened for temporary access/removal and closed again to secure conduit.



Material	Polyamide Nylon 6/6
Certifications	CE Approved as per BS EN50086
Flammability Rating	94V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorous Free
Temperature Rating	The temperature rating for all FPA fittings meets or exceeds that for all Flexicon conduit/tubing

Quick Specs

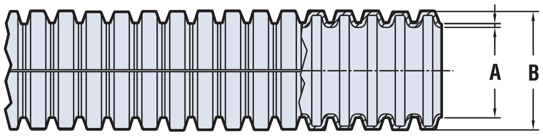
IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco-Flex™ V Nylon Slit Tubing

- Multiple sizes 1/8″ to 1-1/2″.
- Slit design allows side entry and encirclement of pre-assembled harnesses and capillary tubes.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents.
- Heyco-Flex V is lightweight and flexible, yet durable enough to meet your wire management requirements.
- Unique slit design allows for wire breakouts.
- Quick installation; cuts with utility knife, PVC cutter or Heyco cutting tool #8340. See page 1-1.

NOMINAL DIAMETER	PART NO.	DESCRIPTION	PART DIMENSIONS						ROLL LENGTH
	Black		A Outside Diameter		B Inside Diameter		C Wall Thickness Range		
			in.	mm.	in.	mm.	in.	mm.	ft.
1/8	**H-1634A**	HF5 1/8	.260	6,6	.168	4,3	.007-.019	0,18-0,48	100
1/4	**H-1635A**	HF5 1/4	.390	9,9	.288	7,3	.007-.019	0,18-0,48	100
11/32	**H-1636A**	HF5 11/32	.500	12,7	.342	8,7	.007-.019	0,18-0,48	100
3/8	**H-1637A**	HF5 3/8	.532	13,5	.415	10,5	.007-.019	0,18-0,48	100
7/16	**H-1638A**	HF5 7/16	.613	15,6	.440	11,2	.007-.019	0,18-0,48	100
1/2	**H-1639A**	HF5 1/2	.660	16,8	.511	13,0	.007-.019	0,18-0,48	100
5/8	**H-1641A**	HF5 5/8	.806	20,5	.663	16,8	.007-.019	0,18-0,48	100
3/4	**H-1642A**	HF5 3/4	.928	23,6	.790	20,1	.007-.019	0,18-0,48	100
1	**H-1643A**	HF5 1	1.073	27,3	.917	23,3	.007-.019	0,18-0,48	100
1-1/16	**H-1644A**	HF5 1-1/16	1.215	30,9	1.010	25,6	.007-.019	0,18-0,48	100
1-1/4	**H-1646A**	HF5 1-1/4	1.500	38,1	1.295	32,9	.007-.019	0,18-0,48	100
1-1/2	**H-1649A**	HF5 1-1/2	1.734	43,9	1.465	37,2	.007-.019	0,18-0,48	100

Standard color black.



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

Material	Polyamide 6 Nylon
Temperature Range of Use	-40°C to 115°C (-40°F to 239°F) Continuous -40°C to 190°C (-40°F to 374°F) Intermittent
Flammability Rating	94HB

LIQUID TIGHT CORDGRIPS

Liquid Tight Cordgrips Straight-Thru, NPT Hubs
2-1, 2-2, 2-3

Liquid Tight Cordgrips Pigtail, NPT Hubs
2-4, 2-5, 2-6

Liquid Tight Cordgrips Right Angle, NPT Hubs
2-7, 2-8

Liquid Tight Hole Plugs
2-9

Liquid Tight Bushings
2-10

Tite Liquid Tight Cordgrips Straight-Thru, NPT & PG Hubs
2-11, 2-12

Tite Liquid Tight Cordgrips Pigtail, NPT & PG Hubs
2-13, 2-14

Liquid Tight Cordgrips Multi-Hole, NPT Hubs
2-15, 2-16, 2-17

PG Threaded Plugs
2-18

Snap-In Cordgrips
2-19

Nylon and Metal Locknuts NPT, PG Metric
2-20, 2-21

Metal Liquid Tight Cordgrips NPT, PG, Metric
2-22, 2-23, 2-24, 2-25

PG Thread Taps
2-26

ESTCO
Liquid Tight Cordgrips

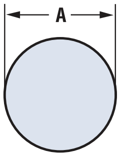
Heyco® Liquid Tight Cordgrips Straight-Thru, NPT Hubs

For Flexible Cords. For use in clearance or threaded holes.

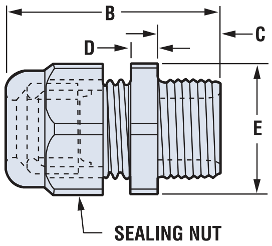
- Multiple sizes for cable diameters ranging from .065˝ (1,7 mm) to 1.730˝ (44,0 mm).
- We recommend using the cordgrip with the smallest maximum diameter that will fit your application.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with TPE or Buna N Sealing Gland resists salt water,
  weak acids, gasoline, alcohol, oil, grease,
  and common solvents. This feature is not assessed by UL.
- TPE Sealing Gland is used in LTF Series.
- Buna N Sealing Gland is used in LTCG Series.
- Suitable for NEMA type 6 enclosures.
- **Locknuts not included**. For nylon locknut specifications or to order locknuts separately, see page 2-21.
- Consult ESTCO for cordgrips molded in other colors.

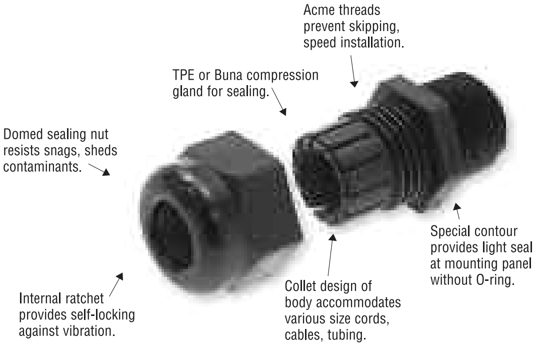
CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.210	5,6	**H-M4514**	**H-M4515**	RLTCG 1/4	.540	13,7	1.28	32,8	.45	11,4	.21	5,3	.63	16,0
.115	2,9	.250	6,3	**H-M4516**	**H-M4517**	LTCG 1/4										
.069	1,8	.187	4,7	**H-3458**	**H-3459**	RLTF 3/8	.670	17,0	1.49	37,8	.53	13,5	.20	5,1	.75	19,1
.181	4,6	.312	7,9	**H-3228**	**H-3229**	LTF 3/8										
.170	4,3	.450	11,4	**H-3231**	**H-3232**	*LTF 1/2	.875	22,2	1.72	43,7	.62	15,7	.20	5,1	.95	24,1
.230	5,8	.546	13,9	**H-3200**	**H-3201**	*LLTF 1/2	.875	22,2	1.83	46,5	.62	15,7	.23	5,8	1.05	26,7
.250	6,4	.485	12,3	**H-3460**	**H-3461**	*RLTF 3/4	1.068	27,1	1.97	50,0	.63	16,0	.23	5,8	1.30	33,0
.450	11,4	.709	18,0	**H-3234**	**H-3235**	*LTF 3/4										
.490	12,0	.785	20,0	**H-M8439**	**H-M8440**	*RLTCG 1	1.326	33,7	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
.590	15,0	1.000	25,4	**H-8437**	**H-8438**	*LTF 1	1.350	34,3	2.42	61,5	.75	19,1	.28	7,1	1.65	41,9
.787	20,0	1.020	26,0	**H-M4522**	**H-M4523**	RLTCG 1-1/4	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,7
.875	22,3	1.260	32,0	**H-M4524**	**H-M4525**	LTCG 1-1/4										
1.230	31,2	1.730	44,0	**H-M3317**	**H-M3318**	LTCG 1-1/2	1.920	48,8	2.81	71,3	.76	19,3	.36	9,1	2.48	63,0
1.000	25,4	1.240	31,5	**H-M3319**	**H-M3320**	RLTCG 1-1/2										
1.450	36,8	1.560	39,6	**H-M3321**	**H-M3322**	LTCG 2	2.400	60,8	2.93	74,3	.79	20,1	.42	10,7	2.75	69,9
1.160	29,5	1.350	34,3	**H-M3323**	**H-M3324**	RLTCG 2										

Standard colors black and gray.
* Ⓤ Listed



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING


B
D
C
E
SEALING NUT


Acme threads prevent skipping, speed installation.
TPE or Buna compression gland for sealing.
Domed sealing nut resists snags, sheds contaminants.
Special contour provides light seal at mounting panel without O-ring.
Internal ratchet provides self-locking against vibration.
Collet design of body accommodates various size cords, cables, tubing.

Consult Heyco for your alternate material requirements!

Quick Specs

Material	6/6 Nylon with Buna N Sealing Gland (LTCG Series) or TPE gland (LTF Series)
Certifications	Ⓤ Listed under Underwriters' Laboratories File E51579 Recognized Under the Component Program of Underwriters' Laboratories File E51579 Certified by Canadian Standards Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C) IP Rating IP 68 (70 PSI, 5 BAR)

ISO 9001:2000 Certified
CERTIFICATE # 08-511

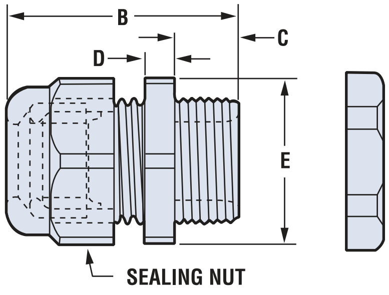
Heyco® Liquid Tight Cordgrips Straight-Thru, PG Hubs

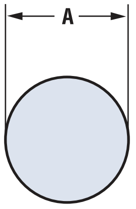
For Flexible Cords. For use in clearance or threaded holes.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.064	1,6	.210	5,3	**H-3444**	**H-3445**	RLTF 7	.492	12,5	1.17	29,7	.33	8,4	.20	5,1	.59	15,0
.114	2,9	.250	6,4	**H-3207**	**H-3208**	LTF 7R										
.069	1,8	.187	4,7	**H-3446**	**H-3447**	LTF 9	.599	15,2	1.30	33,0	.34	8,6	.20	5,1	.75	19,1
.181	4,6	.312	7,9	**H-3210**	**H-3211**	LTF 9										
.069	1,8	.250	6,6	**H-3448**	**H-3449**	RLTF 11	.733	18,6	1.46	37,1	.39	9,9	.20	5,1	.86	21,8
.230	5,8	.395	10,0	**H-3213**	**H-3214**	LTF 11										
.170	4,3	.450	11,9	**H-3216**	**H-3217**	*LTF 13.5	.804.8	20,4	1.53	38,9	.41	10,4	.20	5,1	.95	24,1
.230	5,8	.530	13,9	**H-3219**	**H-3220**	*LTF 16	86	22,5	1.66	42,2	.45	11,4	.23	5,8	1.05	26,7
.250	6,4	.490	12,3	**H-3454**	**H-3455**	*RLTF 21	1.115	28,3	1.87	47,5	.52	13,2	.23	5,8	1.30	33,0
.450	11,4	.705	18,0	**H-3222**	**H-3223**	*LTF 21										
.590	15,0	.990	25,4	**H-3225**	**H-3226**	*LTF 29	1.470	37,3	2.23	56,6	.59	15,0	.28	7,1	1.66	42,2
.787	20,0	1.020	26,0	**H-M3206**	**H-M3205**	*RLTCG 36	1.850	47,0	2.52	64,0	.51	12,9	.32	8,1	2.09	53,1
.875	22,0	1.260	32,0	**H-M3204**	**H-M3203**	*LTCG 36										
1.230	31,2	1.560	39,6	**H-M3212**	**H-M3209**	LTCG 42	2.130	54,1	2.50	63,5	.45	11,4	.36	9,1	2.48	63,0
1.000	25,4	1.240	31,5	**H-M3218**	**H-M3215**	RLTCG 42										
1.450	36,8	1.560	44,0	**H-M3281**	**H-M3282**	LTCG 48	2.340	59,4	2.63	66,7	.49	12,4	.42	10,7	2.75	69,9
1.160	29,5	1.560	34,3	**H-M3283**	**H-M3284**	RLTCG 48										

Standard colors black and gray.
* Ⓤ Listed

- Multiple sizes for cable diameters ranging from .064˝ (1,6 mm) to 1.730˝ (44,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with TPE or Buna N Sealing Gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- TPE Sealing Gland is used in LTF Series.
- Buna N Sealing Gland is used in LTCG Series.
- PG hub threads are steel conduit threads per DIN 40430.
- Suitable for NEMA type 6 enclosures.
- **Locknuts INCLUDED**.
- Consult ESTCO for cordgrips molded in other colors.





SUGGESTED CLEARANCE HOLE
FOR NONTHREADED MOUNTING

Material	6/6 Nylon with Buna N Sealing Gland (LTCG Series) or TPE gland (LTF Series)
Certifications	Ⓤ Listed under Underwriters' Laboratories File E51579 Recognized Under the Component Program of Underwriters' Laboratories File E51579 Certified by Canadian Standards Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C) IP 68 (70 PSI, 5 BAR)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Cordgrips Straight-Thru, Metric Hubs

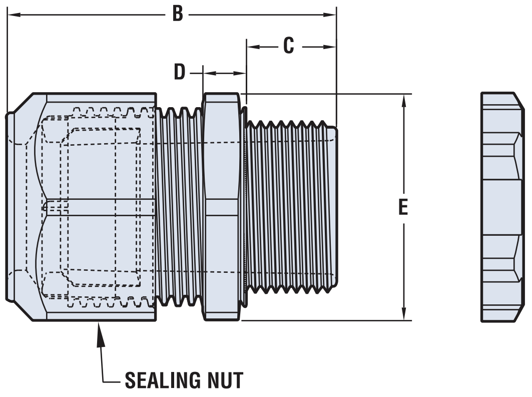
For Flexible Cords. For use in clearance or threaded holes.

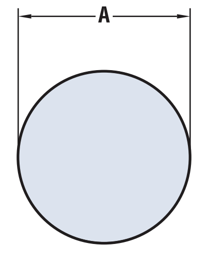
- Multiple sizes for cable diameters ranging from .065˝ (1,7 mm) to 1.730˝ (44,0 mm).
- We recommend using the cordgrip with the smallest maximum diameter that will fit your application.
- Ratchet design of sealing nut assembly provides superior antivibration protection and ensures a firm grip on this cable.
- Integral Sealing Ring ensures a superior seal at mounting locations every time.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Suitable for NEMA 6P enclosures.
- **Locknuts INCLUDED**.
- Consult ESTCO for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M4330**	**H-M4331**	*RLTCG M12	.473	12,0	1.16	29,5	.32	8,1	.21	5,3	.63	16,0
.115	2,9	.250	6,4	**H-M4332**	**H-M4333**	*LTCG M12										
.065	1,7	.187	4,7	**H-M4334**	**H-M4335**	*RLTCG M16	.630	16,0	1.25	31,8	.32	8,1	.21	5,3	.83	21,0
.105	2,7	.312	7,9	**H-M4336**	**H-M4337**	*LTCG M16										
.095	2,4	.260	6,6	**H-M4338**	**H-M4339**	RLTCG M20	.787	20,0	1.49	37,8	.41	10,4	.21	5,3	.98	24,9
.170	4,3	.450	11,4	**H-M4340**	**H-M4341**	LTCG M20										
.250	6,4	.485	12,3	**H-M4342**	**H-M4343**	RLTCG M25	.985	25,0	1.89	48,0	.52	13,2	.25	6,4	1.30	33,0
.485	12,3	.709	18,0	**H-M4344**	**H-M4345**	LTCG M25										
.490	12,4	.787	20,0	**H-M4346**	**H-M4347**	RLTCG M32	1.260	32,0	2.23	56,6	.58	14,7	.30	7,6	1.73	43,9
.590	15,0	1.000	25,4	**H-M4348**	**H-M4349**	LTCG M32										
.787	20,0	1.020	25,9	**H-M4350**	**H-M4351**	RLTCG M40	1.575	40,0	2.39	60,7	.48	12,2	.30	7,6	2.05	52,1
.865	22,0	1.260	32,0	**H-M4352**	**H-M4353**	LTCG M40										
1.23	31,2	1.56	39,6	**H-M3300**	**H-M3301**	LTCG M50	1.97	50,0	2.50	63,5	.45	11,4	.36	9,1	2.48	63,0
1.00	25,4	1.24	31,5	**H-M3302**	**H-M3303**	RLTCG M50										
1.45	36,8	1.730	44,0	**H-M3304**	**H-M3305**	LTCG M63	2.48	63,0	2.63	66,7	.49	12,4	.42	10,7	2.75	69,9
1.16	29,5	1.35	34,2	**H-M3306**	**H-M3307**	RLTCG M63										

Standard colors black and gray.

* RU Recognized under Underwriters' Laboratories.





SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Material	6/6 Nylon with Buna N sealing gland
Certifications	UL Listed under Underwriters' Laboratories File E51579 RU Recognized under the Component Program of Underwriters' Laboratories File E51579 SP Certified by Canadian Standards Association File LR93876C D/E Marks License #136681 CE Per EC Low Voltage Directive 73/23/EEC
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

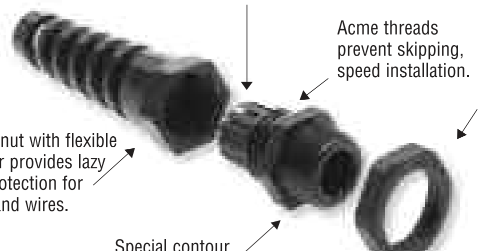
Heyco® Liquid Tight Cordgrips Pigtail™, NPT Hubs

For Flexible Cords. For use in clearance or threaded holes.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.069	1,8	.187	4,7	**H-3474**	**H-3475**	FLEX RLTF 3/8	.670	17,0	2.97	75,4	.53	13,5	.20	5,1	.75	19,1
.181	4,6	.312	7,9	**H-3254**	**H-3255**	FLEX LTF 3/8										
.170	4,3	.470	11,9	**H-3251**	**H-3252**	*FLEX LTF 1/2	.875	22,2	4.09	103,9	.62	15,7	.20	5,1	.95	24,1
.230	5,8	.546	13,9	**H-3266**	**H-3267**	*FLEX LLTF 1/2	.875	22,2	4.54	115,3	.62	15,7	.23	5,8	1.05	26,7
.250	6,4	.485	12,3	**H-3462**	**H-3463**	*FLEX RLTF 3/4	1.068	27,1	5.14	130,6	.63	16,0	.23	5,8	1.30	33,0
.450	11,4	.709	18,0	**H-3239**	**H-3242**	*FLEX LTF 3/4										

Standard colors black and gray.
* Ⓤⓛ Listed

- Multiple sizes for cable diameters ranging from .069˝ (1,8 mm) to .709˝ (18,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with TPE Sealing Gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Flexible Pigtail™ extender prevents sharp bends and extends cable life.
- Suitable for NEMA type 4 and 6 enclosures.
- **Locknuts not included**. For nylon locknut specifications or to order locknuts separately, see page 2-21.
- Consult ESTCO for cordgrips molded in other colors.



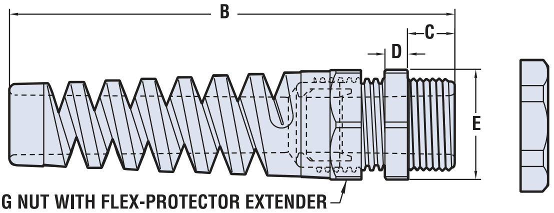
Collet design of body accommodates various size cords, cables, tubing. Compress TPE gland to seal.

Acme threads prevent skipping, speed installation.

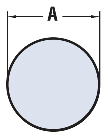
Locking nut with generous wrenching flats.

Sealing nut with flexible extender provides lazy bend protection for cables and wires.

Special contour provides light seal at mounting panel without O-ring.



SEALING NUT WITH FLEX-PROTECTOR EXTENDER



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Material	6/6 Nylon w/TPE Sealing Gland
Certifications	Ⓤⓛ Listed under Underwriters' Laboratories File E51579 Recognized Under the Component Program of Underwriters' Laboratories File E51579 Certified by Canadian Standards Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C) IP 68 (70 PSI, 5 BAR)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

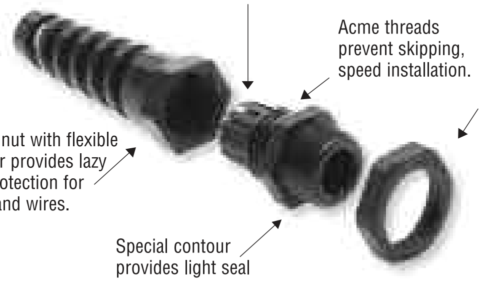
Heyco® Liquid Tight Cordgrips Straight-Thru, NPT Hubs

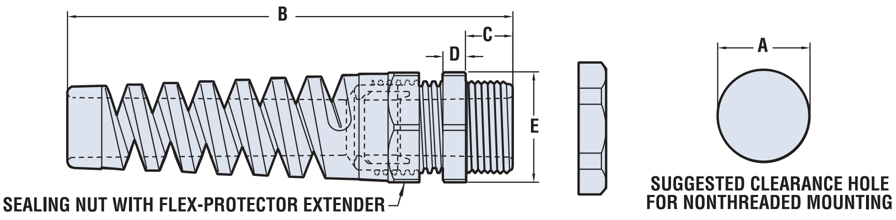
For Flexible Cords. For use in clearance or threaded holes.

- Multiple sizes for cable diameters ranging from .064˝ (1,6 mm) to .709˝ (18,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with TPE Sealing Gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Flexible Pigtail™ extender prevents sharp bends and extends cable life.
- PG hub threads are steel conduit threads per DIN 40430.
- Suitable for NEMA type 4 and 6 enclosures.
- **Locknuts not included**.
- Consult ESTCO for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.064	1,6	.210	5,3	**H-3464**	**H-3465**	FLEX RLTF 7	.492	12,5	2.44	62,0	.33	8,4	.20	5,1	.59	15,0
.114	2,9	.250	6,4	**H-3237**	**H-3238**	FLEX LTF 7										
.069	1,8	.187	4,7	**H-3466**	**H-3467**	FLEX RLTF 9	.599	15,2	2.77	70,4	.34	8,6	.20	5,1	.75	19,1
.181	4,6	.312	7,9	**H-3240**	**H-3241**	FLEX LTF 9										
.069	1,8	.260	6,6	**H-3468**	**H-3469**	FLEX RLTF 11	.733	18,6	3.44	87,4	.39	9,9	.20	5,1	.86	21,8
.230	5,8	.395	10,0	**H-3243**	**H-3244**	FLEX LTF 11										
.170	4,3	.450	11,4	**H-3246**	**H-3247**	*FLEX LTF 13.5	.804	20,4	3.88	98,6	.41	10,4	.20	5,1	.95	24,1
.230	5,8	.546	13,9	**H-3249**	**H-3250**	*FLEX LTF 16	.886	22,5	4.36	110,7	.45	11,4	.23	5,8	1.05	26,7
.250	6,4	.485	12,3	**H-3478**	**H-3479**	*FLEX RLTF 21	1.115	28,3	5.03	127,8	.52	13,2	.23	5,8	1.30	33,0
.450	11,4	.709	18,0	**H-3245**	**H-3248**	*FLEX LTF 21										

Standard colors black and gray.
* Ⓤ Listed


Collet design of body accommodates various size cords, cables, tubing. Compress TPE gland to seal.
Acme threads prevent skipping, speed installation.
Locking nut with generous wrenching flats.
Sealing nut with flexible extender provides lazy bend protection for cables and wires.
Special contour provides light seal at mounting panel without O-ring.


B
C
D
E
A
SEALING NUT WITH FLEX-PROTECTOR EXTENDER
SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Quick Specs

Material	6/6 Nylon with Buna N Sealing Gland
Certifications	Ⓤ Listed under Underwriters' Laboratories File E51579 Recognized Under the Component Program of Underwriters' Laboratories File E51579 Certified by Canadian Standards Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68

ISO 9001:2000 Certified
CERTIFICATE # 08-511

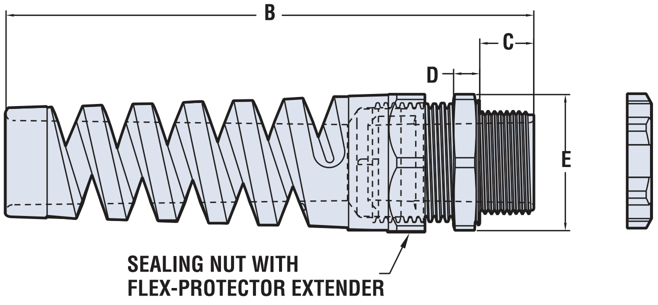
Heyco® Liquid Tight Cordgrips Pigtail™, Metric Hubs

For Flexible Cords. For use in clearance or threaded holes.

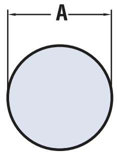
CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M4396**	**H-M4397**	*FLEX RLTCG M12	.473	12,0	2.44	62,0	.32	8,1	.21	5,3	.63	16,0
.115	2,9	.250	6,4	**H-M4398**	**H-M4399**	*FLEX LTCG M12										
.065	1,7	.187	4,7	**H-M4400**	**H-M4401**	*FLEX RLTCG M16	.630	16,0	2.77	70,4	.32	8,1	.21	5,3	.83	21,1
.105	2,7	.312	7,9	**H-M4402**	**H-M4403**	*FLEX LTCG M16										
.095	2,4	.260	6,6	**H-M4404**	**H-M4405**	FLEX RLTCG M20	.787	20,0	3.89	98,8	.41	10,4	.21	5,3	.98	24,9
.170	4,3	.450	11,4	**H-M4406**	**H-M4407**	FLEX LTCG M20										
.250	6,4	.485	12,3	**H-M4408**	**H-M4409**	FLEX RLTCG M25	.985	25,0	5.04	128,0	.52	13,2	.25	6,4	1.30	33,0
.485	12,3	.709	18,0	**H-M4410**	**H-M4411**	FLEX LTCG M25										

Standard colors black and gray.
* Recognized under Underwriters' Laboratories.

- Multiple sizes for cable diameters ranging from .065˝ (1,7 mm) to .709˝ (18,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Ratchet design of sealing nut assembly provide superior antivibration protection and ensures a firm grip on this cable.
- Integral Sealing Ring ensures a superior seal at mounting locations every time.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Flexible Pigtail™ extender prevents sharp bends and extends cable life.
- Suitable for NEMA type 6 and 6P enclosures.
- Consult Heyco for multiple or flat cable sealing glands.
- **Locknuts INCLUDED**.
- Consult ESTCO for cordgrips molded in other colors.



SEALING NUT WITH FLEX-PROTECTOR EXTENDER



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Material	6/6 Nylon with Buna N sealing gland
Certifications	Listed under Underwriters' Laboratories File E51579 Recognized under the Component Program of Underwriters' Laboratories File E51579 Certified by Canadian Standards Association File LR93876C Marks License #136681 CE Per EC Low Voltage Directive 73/23/EEC
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

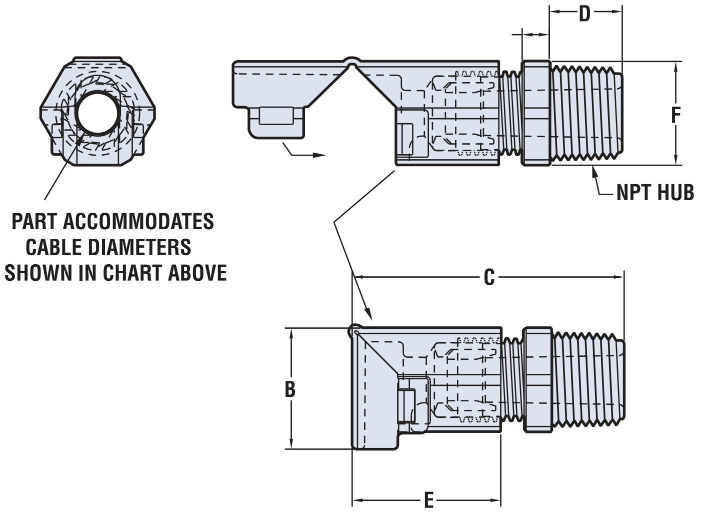
Heyco® Liquid Tight Cordgrips Right Angle, NPT Hubs

For Flexible Cords. For use in clearance or threaded holes.

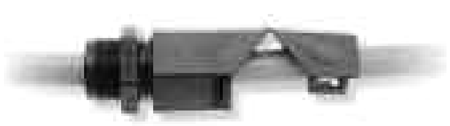
- Multiple sizes for cable diameters ranging from .065″ (1,7 mm) to .450″ (11,4 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Each cordgrip is molded in the open position for ease of installation. After cable insertion, the fitting snaps closed, bending the cable without damage. This assembly method saves considerable time and money.
- Part design provides liquid tight integrity even in the open position.
- Acme threads on body prevent skipping and speed installation.
- Suitable for NEMA 6 and 6P enclosures.
- **Locknuts not included**. For nylon locknut specifications or to order locknuts separately, see page 2-21.
- Consult ESTCO for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS											
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Right Angle Height		C Max O.A. Length (Closed)		D Thread Length		E Sealing Nut Length		F Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M4560**	**H-M4561**	RLTCG 1/4 90	.540	13,7	.69	17,5	1.66	42,2	.45	11,4	.86	21,9	.63	16,0
.115	2,9	.250	6,3	**H-M4562**	**H-M4563**	LTCG 1/4 90												
.069	1,8	.187	4,7	**H-M8560**	**H-M8561**	RLTCG 3/8 90	.670	17,0	.88	22,3	1.96	49,8	.53	13,5	1.07	27,1	.75	19,1
.181	4,6	.305	7,7	**H-M8562**	**H-M8563**	LTCG 3/8 90												
.095	2,4	.260	6,6	**H-M4564**	**H-M4565**	RLTCG 1/2 90	.875	22,2	1.06	26,9	2.40	61,0	.62	15,7	1.38	35,1	.95	24,1
.170	4,3	.450	11,4	**H-M8564**	**H-M8565**	LTCG 1/2 90												

Standard colors black and gray.
* Ⓤ Listed



A
SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING



Quick Specs

Materials	6/6 Nylon w/Buna N Sealing Gland
Certifications	Ⓤ Listed under Underwriters' Laboratories File E51579 Certified by Canadian Standard Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

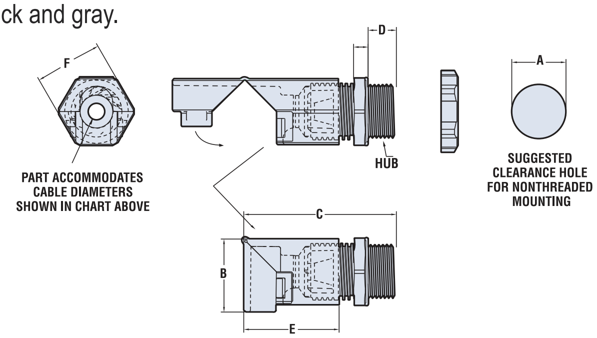
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Cordgrips Right Angle, PG Hubs

For Flexible Cords. For use in clearance or threaded holes.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS											
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Right Angle Height		C Max O.A. Length (Closed)		D Thread Length		E Sealing Nut Length		F Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.064	1,6	.210	5,3	**H-M8530**	**H-M8531**	RLTCG 7 90	.492	12,5	.69	17,5	1.53	38,8	.33	8,4	.86	21,8	.59	15,0
.114	2,9	.250	6,4	**H-M8532**	**H-M8533**	LTCG 7 90												
.069	1,8	.187	4,7	**H-M8534**	**H-M8535**	RLTCG 9 90	.599	15,2	.88	22,3	1.77	44,9	.34	8,6	1.07	27,1	.75	19,1
.181	4,6	.305	7,7	**H-M8536**	**H-M8537**	LTCG 9 90												
.078	2,0	.260	6,6	**H-M8538**	**H-M8539**	RLTCG 1190	.733	18,6	.99	25,1	1.99	50,5	.39	9,9	1.23	31,2	.86	21,8
.230	5,8	.375	9,5	**H-M8540**	**H-M8541**	LTCG 1190												
.095	2,4	.260	6,6	**H-M4542**	**H-M4543**	RLTCG13.590	.804	20,4	1.06	26,9	2.22	56,4	1.38	35,1	1.38	35,1	.98	24,9
.170	4,3	.470	11,9	**H-M8542**	**H-M8543**	*LTCG 13.5 90												

Standard colors black and gray.
* Ⓤ Listed


F
D
A
HUB
PART ACCOMMODATES CABLE DIAMETERS SHOWN IN CHART ABOVE
SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING
C
B
E

Heyco® Liquid Tight Cordgrips Right Angle, Metric Hubs

For Flexible Cords. For use in clearance or threaded holes.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS											
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Right Angle Height		C Max O.A. Length (Closed)		D Thread Length		E Sealing Nut Length		F Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M4448**	**H-M4449**	*RLTCG M12 90	.473	12,0	.69	17,5	1.528	38,8	.32	8,1	.86	21,8	.63	16,0
.115	2,9	.250	6,4	**H-M4450**	**H-M4451**	*LTCG M12 90	.473	12,0	.69	17,5	1.528	38,8	.32	8,1	.86	21,8	.63	16,0
.065	1,7	.187	4,7	**H-M4452**	**H-M4453**	*RLTCG M16 90	.630	16,0	.88	22,4	1.770	45,0	.32	8,1	1.07	27,2	.83	21,0
.105	2,7	.312	7,9	**H-M4454**	**H-M4455**	*LTCG M16 90	.630	16,0	.88	22,4	1.770	45,0	.32	8,1	1.07	27,2	.83	21,0
.095	2,4	.260	6,6	**H-M4456**	**H-M4457**	RLTCG M20 90	.787	20,0	1.06	26,9	2.220	56,4	.41	10,4	1.38	35,1	.98	24,9
.170	4,3	.450	11,4	**H-M4458**	**H-M4459**	LTCG M20 90	.787	20,0	1.06	26,9	2.220	56,4	.41	10,4	1.38	35,1	.98	24,9

Standard colors black and gray.
*Ʀ Recognized under Underwriters' Laboratories.

- Each cordgrip is molded in the open position for ease of installation. After cable insertion, the cordgrip snaps closed, bending the cable without damage. This assembly method saves considerable time and money.
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Part design provides liquid tight integrity even in the open position.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Suitable for NEMA 6P enclosures.
- Ʀ Recognized Under the Component Program of Underwriters' Laboratories File E51579.
- VDE Marks License #13668 for metric parts only.
- CE per CE Low Voltage Directive 73/23/EEC.
- See Quick Specs on page 2-7.
- **Locknuts INCLUDED**.
- Consult ESTCO for cordgrips molded in other colors.

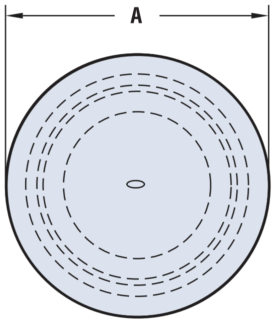
ISO 9001:2000 Certified
CERTIFICATE # 08-511

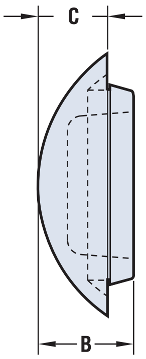
Heyco® Liquid Tight Hole Plugs

- V0 Flammability rating.
- Oil tight, rain tight, submersible.
- UL certified for UV and outdoor applications
- Multiple trade sizes fit 1/2˝ to 1˝ knock-out holes.
- Multiple nominal sizes fit .500˝ to 1.000˝ "true size" mounting holes.
- Locks firmly in boxes from .030˝ (0,8 mm) to .125˝ (3,2 mm) thick.
- Installs with fingertip pressure (no tool required).
- Trade sizes are UL listed under Underwriters' Laboratories File E51579 and CSA Certified by Canadian Standard Association File LR081067C
- True sizes are RU recognized under Underwriters' Laboratories File E51579 and CSA Certified by Canadian Standard Association File LR008919C

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Mounting Hole Diameter		Maximum Thickness		Black	or Trade Size	A Head Dia.		B Overall Height		C Head Thickness	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.500	12,7	.125	3,2	**H-3830**	KOS-LT .500	.910	23,1	.450	11,4	.290	7,4
.625	15,9	.125	3,2	**H-3834**	KOS-LT .625	1.030	26,2	.470	11,9	.310	7,9
.750	19,1	.125	3,2	**H-3831**	KOS-LT .750	1.150	29,2	.510	13,0	.350	8,9
.875	22,2	.125	3,2	**H-3833**	KOS-LT 1/2	1.281	32,5	.530	13,5	.360	9,1
1.000	25,4	.125	3,2	**H-3832**	KOS-LT 1.000	1.410	35,8	.560	14,2	.400	10,2
1.093	27,8	.125	3,2	**H-3835**	KOS-LT 3/4	1.520	38,6	.550	14,0	.400	10,2
1.375	34,9	.125	3,2	**H-3837**	KOS-LT 1	1.780	45,2	.562	14,3	.421	10,7

Standard color black.





Quick Specs

Material	**Santoprene™**
Flammability Rating	**94V-0**

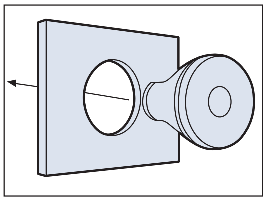
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Snap-in PG Liquid Tight Bushings

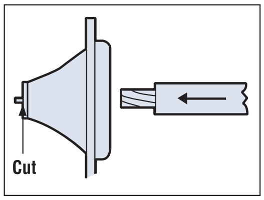
PANEL DIMENSIONS						CABLE DIA. RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS						
Hole Dia.		Thickness Range				Min.		Max.		Grey		D Head Dia.		H Overall Height		L Head Thickness		Hole Size
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
.52	13,2	.04	1,0	.16	4,0	.12	3,0	.20	5,0	**H-4014**	LTB 30-50/PG7	.79	20,0	.24	6,1	.50	12,8	PG7
.63	16,0	.04	1,0	.16	4,0	.20	5,0	.28	7,0	**H-4015**	LTB 50-70/PG9	.79	20,0	.28	7,1	.75	19,0	PG9
.75	19,0	.04	1,0	.16	4,0	.28	7,0	.39	10,0	**H-4016**	LTB 70-100/PG11	.94	24,0	.28	7,1	.81	20,6	PG11
.91	23,0	.04	1,0	.16	4,0	.31	8,0	.55	14,0	**H-4017**	LTB 80-140/PG16	1.10	28,0	.28	7,1	.89	22,5	PG16
1.14	29,0	.04	1,0	.16	4,0	.55	14,0	.79	20,0	**H-4018**	LTB 140-200/PG21	1.36	34,5	.28	7,1	1.02	26,0	PG21
1.50	38,0	.04	1,0	.16	4,0	.79	20,0	1.02	26,0	**H-4019**	LTB 200-260/PG29	1.81	46,0	.26	6,5	1.14	29,0	PG29
1.89	48,0	.04	1,0	.16	4,0	1.02	26,0	1.38	35,0	**H-4020**	LTB 260-350/PG36	2.26	57,5	.31	8,0	1.42	36,0	PG36

Standard color gray.

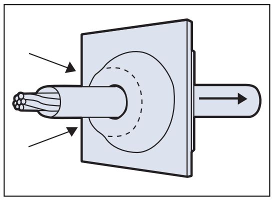
- Can be used in threaded or unthreaded holes.
- Ozone and weather resistant.
- Provides light strain relief to the cable.
- Simple to install–just snap into place, pierce thin membrane, insert & pull back cable.
- Can be used as a liquid tight plug. Offers protection to IP 67.
- Sizes available to fit cable diameters ranging from .12″ (3,0 mm) up to 1.38″ (35,0 mm).
- For outdoor and indoor applications.



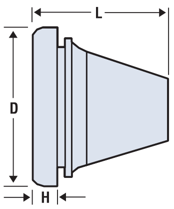
Snap Into Panel



Cut as shown and Insert Cable



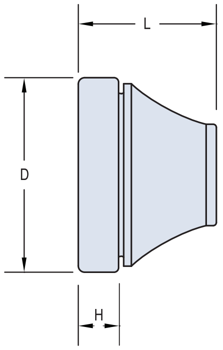
Pull Back Cable to Form Seal



Heyco® Snap-In Metric Liquid Tight Bushings

PANEL DIMENSIONS						CABLE DIA. RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS						
Hole Dia.		Thickness Range				Min.		Max.		Grey		D Head Dia.		H Overall Height		L Head Thickness		Hole Size
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
.49	12,5	.02	0,5	.08	2,0	.16	4,0	.28	7,0	**H-4007**	LTB 30-50/M12	.79	20,0	.22	5,6	.50	12,8	M12
.65	16,5	.04	1,0	.16	4,0	.20	5,0	.35	9,0	**H-4008**	LTB 50-70/M16	.83	21,0	.46	11,6	.70	17,7	M16
.81	20,5	.04	1,0	.16	4,0	.32	8,0	.51	13,0	**H-4009**	LTB 70-100/M20	1.00	25,5	.53	13,4	.79	20,0	M20
1.00	25,5	.04	1,0	.16	4,0	.43	11,0	.67	17,0	**H-4010**	LTB 100-140/M25	1.20	30,5	.60	15,3	.84	21,3	M25
1.28	32,5	.04	1,0	.16	4,0	.59	15,0	.79	20,0	**H-4011**	LTB 140-200/M32	1.52	38,5	.73	18,6	.97	24,6	M32
1.59	40,5	.04	1,0	.16	4,0	.75	19,0	1.10	28,0	**H-4012**	LTB 200-260/M40	1.91	48,5	.85	21,7	1.16	29,5	M40
1.99	50,5	.04	1,0	.16	4,0	1.06	27,0	1.38	35,0	**H-4013**	LTB 260-350/M50	2.38	60,5	.98	25,0	1.37	34,8	M50

Standard color gray.



Material	Ethylene Propylene Diene Monomer Rubber (EPDM)
Temperature Rating	-40°F (-40°C) to 200°F (93°C)
IP Rating	IP 67

Quick Specs

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Cordgrips Straight-Thru, NPT Hubs

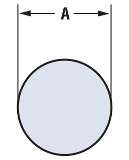
For Flexible Cords. For use in clearance or threaded holes.

- Multiple sizes for cable diameters ranging from .065″ (1,7 mm) to 1.730″ (44,0 mm).
- We recommend using the cordgrip with the smallest maximum diameter that will fit your application.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with TPE or Buna N Sealing Gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- TPE Sealing Gland is used in LTF Series.
- Buna N Sealing Gland is used in LTCG Series.
- Suitable for NEMA type 6 enclosures.
- **Locknuts not included**. For nylon locknut specifications or to order locknuts separately, see page 2-21.
- Consult ESTCO for cordgrips molded in other colors.

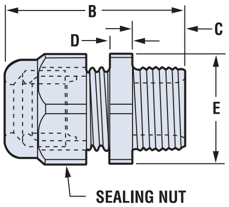
CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.210	5,6	**H-M4514**	**H-M4515**	RLTCG 1/4	.540	13,7	1.28	32,8	.45	11,4	.21	5,3	.63	16,0
.115	2,9	.250	6,3	**H-M4516**	**H-M4517**	LTCG 1/4										
.069	1,8	.187	4,7	**H-3458**	**H-3459**	RLTF 3/8	.670	17,0	1.49	37,8	.53	13,5	.20	5,1	.75	19,1
.181	4,6	.312	7,9	**H-3228**	**H-3229**	LTF 3/8										
.170	4,3	.450	11,4	**H-3231**	**H-3232**	*LTF 1/2	.875	22,2	1.721	43,7	.62	15,7	.20	5,1	.95	24,1
.230	5,8	.546	13,9	**H-3200**	**H-3201**	*LLTF 1/2	.875	22,2	.83	46,5	.62	15,7	.23	5,8	1.05	26,7
.250	6,4	.485	12,3	**H-3460**	**H-3461**	*RLTF 3/4	1.068	27,1	1.97	50,0	.63	16,0	.23	5,8	1.30	33,0
.450	11,4	.709	18,0	**H-3234**	**H-3235**	*LTF 3/4										
.490	12,0	.785	20,0	**H-M8439**	**H-M8440**	*RLTCG 1	1.326	33,7	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
.590	15,0	1.000	25,4	**H-8437**	**H-8438**	*LTF 1	1.350	34,3	2.42	61,5	.75	19,1	.28	7,1	1.65	41,9
.787	20,0	1.020	26,0	**H-M4522**	**H-M4523**	RLTCG 1-1/4	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,7
.875	22,3	1.260	32,0	**H-M4524**	**H-M4525**	LTCG 1-1/4										
1.230	31,2	1.730	44,0	**H-M3317**	**H-M3318**	LTCG 1-1/2	1.920	48,8	2.81	71,3	.76	19,3	.36	9,1	2.48	63,0
1.000	25,4	1.240	31,5	**H-M3319**	**H-M3320**	RLTCG 1-1/2										
1.450	36,8	1.560	39,6	**H-M3321**	**H-M3322**	LTCG 2	2.400	60,8	2.93	74,3	.79	20,1	.42	10,7	2.75	69,9
1.160	29,5	1.350	34,3	**H-M3323**	**H-M3324**	RLTCG 2										

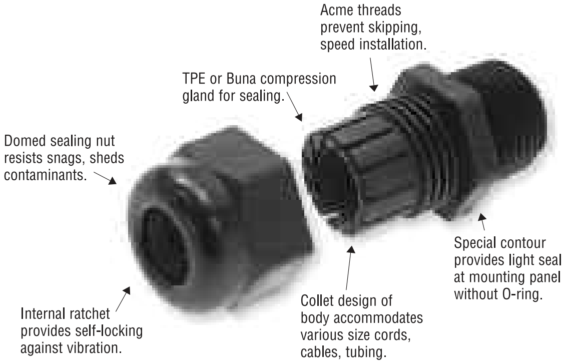
Standard colors black and gray.

* Ⓤ Listed



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING


B
D
C
E
SEALING NUT


Acme threads prevent skipping, speed installation.
TPE or Buna compression gland for sealing.
Domed sealing nut resists snags, sheds contaminants.
Special contour provides light seal at mounting panel without O-ring.
Internal ratchet provides self-locking against vibration.
Collet design of body accommodates various size cords, cables, tubing.

Quick Specs

Material	6/6 Nylon with Buna N Sealing Gland (LTCG Series) or TPE gland (LTF Series)
Certifications	Ⓤ Listed under Underwriters' Laboratories File E51579 Recognized Under the Component Program of Underwriters' Laboratories File E51579 Certified by Canadian Standards Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco®-*Tite* Liquid Tight Cordgrips Straight-Thru, PG Hubs

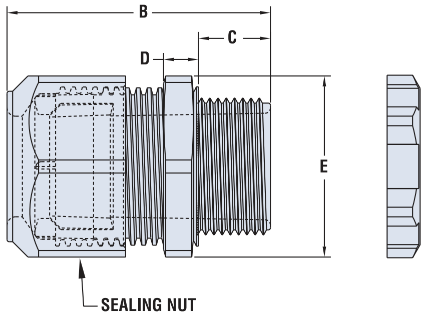
For Flexible Cords. For use in clearance or threaded holes.

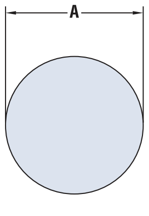
The Ultimate in Liquid Tight Strain Relief Protection

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M3444**	**H-M3445**	*RLTCG 7	.492	12,5	1.16	29,5	.32	8,1	.21	5,3	.63	16,0
.115	2,9	.250	6,4	**H-M3207**	**H-M3208**	*LTCG 7										
.065	1,7	.187	4,7	**H-M3446**	**H-M3447**	*RLTCG 9	.599	15,2	1.25	31,8	.32	8,1	.21	5,3	.83	21,0
.105	2,7	.312	7,9	**H-M3210**	**H-M3211**	*LTCG 9										
.069	1,8	.250	6,6	**H-M3448**	**H-M3449**	*RLTCG 11	.733	18,6	1.48	37,6	.38	9,7	.21	5,3	.94	23,9
.230	5,8	.395	10,0	**H-M3213**	**H-M3214**	*LTCG 11										
.095	2,4	.260	6,6	**H-M4500**	**H-M4501**	RLTCG 13.5	.804	20,4	1.50	38,1	.41	10,4	.21	5,3	.98	24,9
.170	4,3	.450	11,4	**H-M3216**	**H-M3217**	LTCG 13.5										
.180	4,6	.440	11,2	**H-M4502**	**H-M4503**	RLTCG 16	.886	22,5	1.68	42,7	.44	11,2	.25	6,4	1.06	26,9
.260	5,8	.546	13,9	**H-M3219**	**H-M3220**	LTCG 16										
.250	6,4	.485	12,3	**H-M3454**	**H-M3455**	RLTCG 21	1.115	28,3	1.89	48,0	.52	13,2	.25	6,4	1.30	33,0
.485	12,3	.709	18,0	**H-M3222**	**H-M3223**	LTCG 21										
.490	12,4	.787	20,0	**H-M4504**	**H-M4505**	RLTCG 29	1.470	37,7	2.23	56,6	.58	14,7	.30	7,6	1.73	43,9
.590	15,0	1.000	25,4	**H-M3225**	**H-M3226**	LTCG 29										
.787	20,0	1.020	25,9	**H-M3206**	**H-M3205**	RLTCG 36	1.875	47,6	2.72	69,1	.47	11,9	.31	7,6	2.05	52,1
.865	22,0	1.260	32,0	**H-M3204**	**H-M3203**	LTCG 36										
1.00	25,4	1.240	31,5	**H-M3218**	**H-M3215**	*RLTCG 42	2.13	54,1	2.50	63,5	.45	11,4	.36	9,1	2.48	63,0
1.23	31,2	1.560	39,6	**H-M3212**	**H-M3209**	*LTCG 42										
1.16	29,5	1.560	34,3	**H-M3283**	**H-M3284**	*RLTCG 48	2.34	59,4	2.63	66,7	.49	12,4	.42	10,7	2.75	69,9
1.45	36,8	1.560	44,0	**H-M3281**	**H-M3282**	*LTCG 48										

Standard colors black and gray.
* ʀᴜ Recognized under Underwriters' Laboratories.

- Multiple sizes for cable diameters ranging from .065″ (1,7 mm) to 1.730″ (44,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Ratchet design of sealing nut assembly provide superior antivibration protection and ensures a firm grip on this cable.
- Integral Sealing Ring ensures a superior seal at mounting locations every time.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Suitable for NEMA 6 and 6P enclosures.
- **Locknuts INCLUDED**.
- Consult ESTCO for cordgrips molded in other colors.





SUGGESTED CLEARANCE HOLE
FOR NONTHREADED MOUNTING

Materials	**6/6 Nylon w/Buna N Sealing Gland**
Certifications	**Ⓤ Listed Underwriters' Laboratories File E51579** **Ⓢ Certified by Canadian Standard Association File LR93876C**
Flammability Rating	**94V-2**
Temperature Rating	**Static -40°F (-40°C) to 239°F (115°C)** **Dynamic -4°F (-20°C) to 212°F (100°C)**
IP Rating	**IP 68 (70 PSI, 5 BAR)**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco®-*Tite* Liquid Tight Cordgrips Pigtail™, NPT Hubs

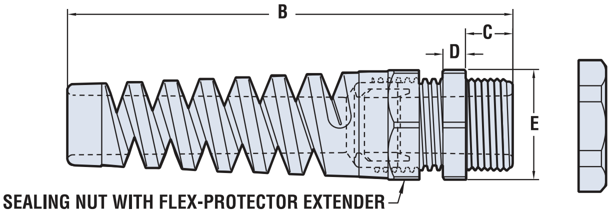
For Flexible Cords. For use in clearance or threaded holes.

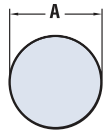
The Ultimate in Liquid Tight Strain Relief Protection

- Multiple sizes for cable diameters ranging from .065″ (1,7 mm) to .709″ (18,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Ratchet design of sealing nut assembly provides superior antivibration protection and ensures a firm grip on the cable.
- Integral Sealing Ring ensures a superior seal at mounting location every time.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Suitable for NEMA 6 and 6P enclosures.
- Locknuts not included. For nylon locknut specifications or to order locknuts separately, see page 2-21.
- Consult ESTCO for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M4536**	**H-M4537**	RLTCG 1/4 Flex	.540	13,7	2.57	65,3	.45	11,4	.21	5,3	.63	16,0
.115	2,9	.250	6,4	**H-M4538**	**H-M4539**	LTCG 1/4 Flex										
.065	1,7	.187	4,7	**H-M3474**	**H-M3475**	RLTCG 3/8 Flex	.680	17,3	2.94	74,7	.49	12,4	.21	5,3	.83	21,1
.105	2,7	.312	7,9	**H-M3254**	**H-M3255**	LTCG 3/8 Flex										
.095	2,4	.260	6,6	**H-M4540**	**H-M4541**	*RLTCG1/2 Flex	.875	22,2	4.09	103,8	.61	15,5	.21	5,3	.98	24,9
.170	4,3	.450	11,4	**H-M3251**	**H-M3252**	*LTCG 1/2 Flex										
.250	6,4	.485	12,3	**H-M3462**	**H-M3463**	*RLTCG 3/4 Flex	1.040	26,4	5.15	130,8	.62	15,7	.25	6,4	1.30	33,0
.485	12,3	.709	18,0	**H-M3239**	**H-M3242**	*LTCG 3/4 Flex										

Standard colors black and gray.
* Ⓤ Listed





SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Quick Specs

Materials	6/6 Nylon w/Buna N Sealing Gland
Certifications	Ⓤ Listed Underwriters' Laboratories File E51579 Ⓢ Certified by Canadian Standard Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco®-*Tite* Liquid Tight Cordgrips Pigtail™, PG Hubs

For Flexible Cords. For use in clearance or threaded holes.

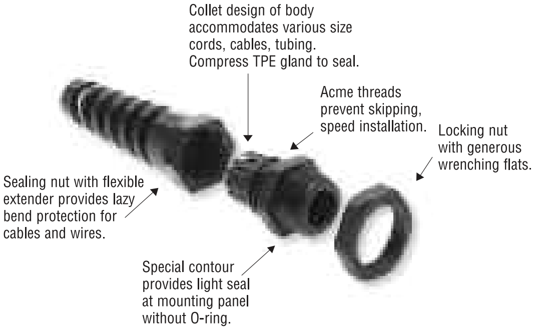
The Ultimate in Liquid Tight Strain Relief Protection

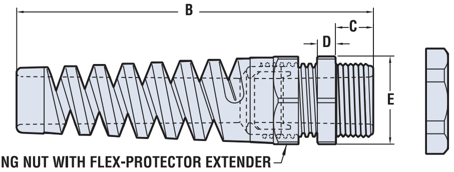
CABLE DIA. RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS									
Min. Dia.		Max. Dia.		Black	Grey		A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flats	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
.065	1,7	.220	5,6	**H-M3464**	**H-M3465**	RLTCG 7 FLEX	.492	12,5	2.44	62,0	.32	8,1	.21	5,3	.63	16,0
.115	2,9	.250	6,4	**H-M3237**	**H-M3238**	LTCG 7 FLEX										
.065	1,7	.187	4,7	**H-M3466**	**H-M3467**	RLTCG 9 FLEX	.599	15,2	2.77	70,4	.32	8,1	.21	5,3	.83	21,0
.105	2,7	.312	7,9	**H-M3240**	**H-M3241**	LTCG 9 FLEX										
.069	1,8	.250	6,6	**H-M3468**	**H-M3469**	RLTCG 11 FLEX	.733	18,6	3.46	87,9	.38	9,7	.21	5,3	.94	23,9
.230	5,8	.395	10,0	**H-M3243**	**H-M3244**	LTCG 11 FLEX										
.095	2,4	.260	6,6	**H-M4526**	**H-M4527**	*RLTCG 13 FLEX	.804	20,4	3.89	98,8	.41	10,4	.21	5,3	.98	24,9
.170	4,3	.450	11,4	**H-M3246**	**H-M3247**	*LTCG 13 FLEX										
.180	4,6	.440	11,2	**H-M4528**	**H-M4529**	*RLTCG 16 FLEX	.886	22,5	4.37	111,0	.44	11,2	.25	6,4	1.06	26,9
.230	5,8	.546	13,9	**H-M3249**	**H-M3250**	*LTCG 16 FLEX										
.250	6,4	.485	12,3	**H-M3478**	**H-M3479**	*RLTCG 21 FLEX	1.115	28,3	5.04	128,0	.52	13,2	.25	6,4	1.30	33,0
.485	12,3	.709	18,0	**H-M3245**	**H-M3248**	*LTCG 21 FLEX										

Standard colors black and gray.

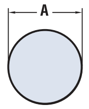
Ⓤ Listed. All others ЯU Recognized under Components Program of Underwriters' Laboratories.

- Multiple sizes for cable diameters ranging from .065″ (1,7 mm) to .709″ (18,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Ratchet design of sealing nut assembly provides superior antivibration protection and ensures a firm grip on this cable.
- Integral Sealing Ring ensures a superior seal at mounting locations every time.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- Flexible Pigtail™ extender prevents sharp bends and extends cable life.
- Suitable for NEMA 6 and 6P enclosures.
- **Locknuts INCLUDED**.
- Consult ESTCO for cordgrips molded in other colors.


Collet design of body accommodates various size cords, cables, tubing. Compress TPE gland to seal.
Acme threads prevent skipping, speed installation.
Locking nut with generous wrenching flats.
Sealing nut with flexible extender provides lazy bend protection for cables and wires.
Special contour provides light seal at mounting panel without O-ring.



SEALING NUT WITH FLEX-PROTECTOR EXTENDER



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Material	6/6 Nylon with Buna N Sealing Gland
Certifications	Ⓤ Listed under Underwriters' Laboratories File E51579
	ЯU Recognized Under the Component Program of Underwriters' Laboratories File E51579
	Ⓢ Certified by Canadian Standards Association File LR93876C
Flammability Rating	94V-2
Temperature Rating	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Cordgrips Multi-Hole, NPT Hubs

- Parts M3231GAE, M3200GAH, M3234GAF, and M3234GAG are UL approved under File #E-51579
- All accompanying Cordgrips are made of nylon construction with TPE sealing glands that resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- **Locknuts not included**. For nylon locknut specifications or to order locknuts separately, see page 2-21.
- For body part dimensions see page 2-11.
- Multi-hole glands are only to be used with Heyco Liquid Tight Cordgrips and are not sold separately.
- Consult ESTCO for cordgrips molded in other colors.

PART NO. Black	DESCRIPTION	GLAND CONFIGURATIONS
H-M3228GH	LTCG 3/8	2- 1,7 mm holes
H-M3228GP	LTCG 3/8	2- 3,0 mm holes
H-M3228GJ	LTCG 3/8	3- 1,7 mm holes
H-M3228GAP	LTCG 3/8	4- 1,4 mm holes
H-M3228GK	LTCG 3/8	4- 1,7 mm holes
H-M3228GM	LTCG 3/8	4- 2,3 mm holes
H-M3228GG	LTCG 3/8	5- 1,6 mm holes
H-M3228GAZ	LTCG 3/8	6- 1,4 mm holes
H-M3228GE	LTCG 3/8	10-1,4 mm holes
H-M3231GN	LTCG 1/2	2- 2,5 mm holes
H-M3231GT	LTCG 1/2	2- 3,8 mm holes
H-M3231GAB	LTCG 1/2	2- 4,2 mm holes
H-M3231GAC	LTCG 1/2	2- 5,0 mm holes
H-M3231GAE*	LTCG 1/2	2- 5,2 mm holes
H-M3231GL	LTCG 1/2	3- 2,0 mm holes
H-M3231GQ	LTCG 1/2	3- 3,0 mm holes
H-M3231GX	LTCG 1/2	3- 4,0 mm holes
H-M3231GS	LTCG 1/2	6- 3,0 mm holes
H-M3231GZA	LTCG 1/2	9,9 x 4,9 mm flat
H-M3231GZB	LTCG 1/2	10,7 x 5,3 mm flat
H-M3200GAJ	LTCG LL1/2	2- 6,0 mm holes
H-M3200GQ	LTCG LL1/2	3- 3,0 mm holes
H-M3200GX	LTCG LL1/2	3- 4,0 mm holes
H-M3200GAH*	LTCG LL1/2	3- 5,6 mm holes
H-M3200GR	LTCG LL1/2	4- 3,0 mm holes
H-M3200GY	LTCG LL1/2	4- 4,0 mm holes
H-M3200GZ	LTCG LL1/2	5- 4,0 mm holes
H-M3200GS	LTCG LL1/2	6- 3,0 mm holes
H-M3200GW	LTCG LL1/2	6- 3,8 mm holes
H-M3200GBB	LTCG LL1/2	6- 4,0 mm holes
H-M3234GAN	LTCG 3/4	2- 7,4 mm holes
H-M3234GAQ	LTCG 3/4	2- 8,0 mm holes
H-M3234GAF*	LTCG 3/4	3- 5,2 mm holes
H-M3234GAM	LTCG 3/4	4- 4,6 mm holes
H-M3234GBE	LTCG 3/4	3- 7,0 mm holes
H-M3234GAD	LTCG 3/4	4- 4,6 mm holes
H-M3234GAG*	LTCG 3/4	4- 5,2 mm holes
H-M3234GBC	LTCG 3/4	4- 6,0 mm holes
H-M3234GZA	LTCG 3/4	9,9 x 4,9 mm flat
M3234GZB	LTCG 3/4	10,7 x 5,3 mm flat
H-M3234GZE	LTCG 3/4	8,9 x 4,5 mm flat
H-M3234GZF	LTCG 3/4	10,7 x 4,8 mm flat
H-M3234GZG	LTCG 3/4	16,1 x 4,8 mm flat
H-M8437GAS	LTCG 1	4- 9,0 mm holes
H-M8437GAX	LTCG 1	4- 9,5 mm holes
H-M8437GAL	LTCG 1	6- 6,5 mm holes
H-M8437GZH	LTCG 1	17,5 x 4,8 mm flat
H-M8437GBF	LTCG 1	9- 4,5 mm holes
H-M4524GAT	LTCG 1-1/4	5- 9,0 mm holes
H-M4524GAL	LTCG 1-1/4	6- 6,5 mm holes
H-M4524GAR	LTCG 1-1/4	6- 8,0 mm holes
H-M4524GAW	LTCG 1-1/4	7- 9,0 mm holes
H-M4524GBG	LTCG 1-1/4	13- 4,5 mm holes

Standard color black.
*Parts are UL approved under File #E-51579

Quick Specs

Material	**6/6 Nylon with TPE sealing gland**
Flammability Rating	**94V-2 Standard**
Temperature Rating	**-22°F (-30°C) to 212°F (100°C)**
IP Rating	**IP 68**

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Cordgrips Multi-Hole, PG Hubs

PART NO. Black	DESCRIPTION	GLAND CONFIGURATIONS
H-M3207GBA	LTCG 7	2- 1,5 mm holes
H-M3210GH	LTCG 9	2- 1,7 mm holes
H-M3210GP	LTCG 9	2- 3,0 mm holes
H-M3210GJ	LTCG 9	3- 1,7 mm holes
H-M3210GAP	LTCG 9	4- 1,4 mm holes
H-M3210GK	LTCG 9	4- 1,7 mm holes
H-M3210GM	LTCG 9	4- 2,3 mm holes
H-M3210GG	LTCG 9	5- 1,6 mm holes
H-M3210GAZ	LTCG 9	6- 1,4 mm holes
H-M3210GE	LTCG 9	10- 1,4 mm holes
H-M3213GP	LTCG 11	2- 3,0 mm holes
H-M3213GAK	LTCG 11	2- 4,0 mm holes
H-M3213GF	LTCG 11	3- 1,5 mm holes
H-M3213GQ	LTCG 11	3- 3,0 mm holes
H-M3213GAY	LTCG 11	4- 2,8 mm holes
H-M3216GN	LTCG 13	2- 2,5 mm holes
H-M3216GT	LTCG 13	2- 3,8 mm holes
H-M3216GAB	LTCG 13	2- 4,2 mm holes
H-M3216GAC	LTCG 13	2- 5,0 mm holes
H-M3216GAE	LTCG 13	2- 5,2 mm holes
H-M3216GL	LTCG 13	3- 2,0 mm holes
H-M3216GQ	LTCG 13	3- 3,0 mm holes
H-M3216GX	LTCG 13	3- 4,0 mm holes
H-M3216GS	LTCG 13	6- 3,0 mm holes
H-M3219GAJ	LTCG 16	2- 6,0 mm holes
H-M3219GQ	LTCG 16	3- 3,0 mm holes
H-M3219GX	LTCG 16	3- 4,0 mm holes
H-M3219GAH	LTCG 16	3- 5,6 mm holes
H-M3219GR	LTCG 16	4- 3,0 mm holes
H-M3219GY	LTCG 16	4- 4,0 mm holes
H-M3219GZ	LTCG 16	5- 4,0 mm holes
H-M3219GS	LTCG 16	6- 3,0 mm holes
H-M3219GW	LTCG 16	6- 3,8 mm holes
H-M3219GBB	LTCG 16	6- 4,0 mm holes
H-M3222GAN	LTCG 21	2- 7,4 mm holes
H-M3222GAQ	LTCG 21	2- 8,0 mm holes
H-M3222GAF	LTCG 21	3- 5,2 mm holes
H-M3222GAM	LTCG 21	3- 7,0 mm holes
H-M3222GAD	LTCG 21	4- 5,0 mm holes
H-M3222GAG	LTCG 21	4- 5,2 mm holes
H-M3222GBC	LTCG 21	4- 6,0 mm holes
H-M3225GAS	LTCG 29	4- 9,0 mm holes
H-M3225GAX	LTCG 29	4- 9,5 mm holes
H-M3225GAL	LTCG 29	6- 6,5 mm holes
H-M3204GAT	LTCG 36	5- 9,0 mm holes
H-M3204GAL	LTCG 36	6- 6,5 mm holes
H-M3204GAR	LTCG 36	6- 8,0 mm holes
H-M3204GAW	LTCG 36	7- 9,0 mm holes

Standard color black.

- All accompanying Cordgrips are made of nylon construction with TPE sealing glands that resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- **Locknuts INCLUDED**.
- For body part dimensions see page 2-12.
- Multi-hole glands are only to be used with Heyco Liquid Tight Cordgrips and are not sold separately.
- Consult ESTCO for cordgrips molded in other colors.

Material	6/6 Nylon with TPE sealing gland
Flammability Rating	94V-2 Standard
Temperature Rating	-22°F (-30°C) to 212°F (100°C)
IP Rating	IP 68

Quick Specs

IMSG

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Cordgrips Multi-Hole, Metric Hubs

- All accompanying Cordgrips are made of nylon construction with TPE sealing glands that resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL.
- **Locknuts INCLUDED**.
- For body part dimensions see page 2-3.
- Multi-hole glands are only to be used with Heyco Liquid Tight Cordgrips and are not sold separately.
- Consult ESTCO for cordgrips molded in other colors.

PART NO. Black	DESCRIPTION	GLAND CONFIGURATIONS
H-M4336GH	LTCG M16	2- 1,7 mm holes
H-M4336GP	LTCG M16	2- 3,0 mm holes
H-M4336GJ	LTCG M16	3- 1,7 mm holes
H-M4336GAP	LTCG M16	4- 1,4 mm holes
H-M4336GK	LTCG M16	4- 1,7 mm holes
H-M4336GM	LTCG M16	4- 2,3 mm holes
H-M4336GG	LTCG M16	5- 1,6 mm holes
H-M4336GAZ	LTCG M16	6- 1,4 mm holes
H-M4336GE	LTCG M16	10-1,4 mm holes
H-M4340GN	LTCG M20	2- 2,5 mm holes
H-M4340GT	LTCG M20	2- 3,8 mm holes
H-M4340GAB	LTCG M20	2- 4,2 mm holes
H-M4340GAC	LTCG M20	2- 5,0 mm holes
H-M4340GAE	LTCG M20	2- 5,2 mm holes
H-M4340GL	LTCG M20	3- 2,0 mm holes
H-M4340GQ	LTCG M20	3- 3,0 mm holes
H-M4340GX	LTCG M20	3- 4,0 mm holes
H-M4340GS	LTCG M20	6- 3,0 mm holes

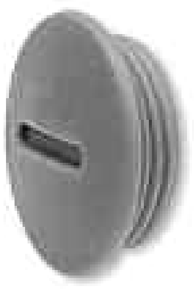
PART NO. Black	DESCRIPTION	GLAND CONFIGURATIONS
H-M4344GAN	LTCG M25	2- 7,4 mm holes
H-M4344GAQ	LTCG M25	2- 8,0 mm holes
H-M4344GAF	LTCG M25	3- 5,2 mm holes
H-M4344GAM	LTCG M25	3- 7,0 mm holes
H-M4344GAD	LTCG M25	4- 5,0 mm holes
H-M4344GAG	LTCG M25	4- 5,2 mm holes
H-M4344GBC	LTCG M25	4- 6,0 mm holes
H-M4348GAS	LTCG M32	4- 9,0 mm holes
H-M4348GAX	LTCG M32	4- 9,5 mm holes
H-M4348GAL	LTCG M32	6- 6,5 mm holes
H-M4352GAT	LTCG M40	5- 9,0 mm holes
H-M4352GAL	LTCG M40	6- 6,5 mm holes
H-M4352GAR	LTCG M40	6- 8,0 mm holes
H-M4352GAW	LTCG M40	7- 9,0 mm holes

Standard color black.

Quick Specs

Material	**6/6 Nylon with TPE sealing gland**
Flammability Rating	**94V-2 Standard**
Temperature Rating	**-22°F (-30°C) to 212°F (100°C)**
IP Rating	**IP 68**

ISO 9001:2000 Certified
CERTIFICATE # 08-511



Heyco® PG Threaded Plugs

PART NO.	THREAD TYPE/SIZE	A Head Diameter		B Overall Height	
Gray		in.	mm.	in.	mm.
H-3405	PG 7	.59	15,0	.32	8,0
H-3407	PG 9	.75	19,0	.37	9,5
H-3402	PG 11	.87	22,0	.39	10,0
H-3412	PG 13	.98	25,0	.39	10,0
H-3414	PG 16	1.06	27,0	.39	10,0
H-3416	PG 21	1.30	33,0	.47	12,0
H-3418	PG 29	1.73	44,0	.47	11,5
H-3415	PG 36	2.17	55,0	.55	14,0
H-3417	PG 48	2.72	69,0	.63	16,0

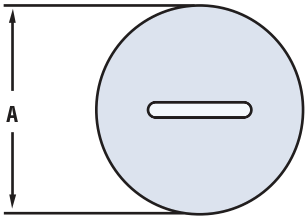
Standard color light gray.

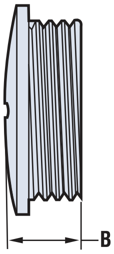
- Metric plugs are molded of shock resistant polystyrol and PG plugs are molded of Nylon 6/6.
- Working temperature range: -4°F (-20°C) to 176°F (80°C).
- Protection Class IP 50.
- Consult ESTCO for other colors.

Heyco® Metric Threaded Plugs

PART NO.	THREAD TYPE/SIZE	A Head Diameter		B Overall Height	
Gray		in.	mm.	in.	mm.
H-3403	M12 x 1,5	.59	15,0	.41	10,5
H-3404	M16 x 1,5	.79	20,0	.41	10,5
H-3406	M20 x 1,5	.95	24,0	.41	10,5
H-3408	M25 x 1,5	1.18	30,0	.51	13,0
H-3409	M32 x 1,5	1.48	37,0	.53	13,5
H-3410	M40 x 1,5	1.81	46,0	.55	14,0
H-3411	M50 x 1,5	2.17	55,0	.63	16,0
H-3413	M63 x 1,5	2.76	70,0	.71	18,0

Standard color light gray.





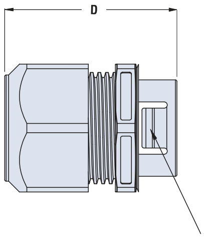
ISO 9001:2000 Certified
CERTIFICATE # 08-511

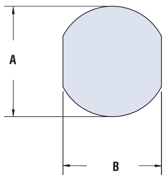
Heyco® Snap-In Cordgrips

- Available in multiple sizes for cable diameters ranging from .065″ (1,7 mm) to 1.560″ (39,6 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Smooth, rounded interior edges for ease of installation.
- Ratchet design of sealing nut assembly provides superior antivibration and ensures a firm grip on the cable.
- Easy to install–no tools required.
- Unique fingers securely lock into a range of panel sizes without use of locknut.
- Rotation prevented when used in “Double D” mounting holes.
- Limited intrusion into enclosure where access is tight.
- Consult ESTCO for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS BODY AND SEALING UNIT							
Min. Dia.		Max Dia.		Black		A Mounting Hole		B To Prevent Rotation		C Panel Thickness		D Max. O.A. Length	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.
.115	2,9	.250	6,4	**H-M4800**	SCG 500	.500	12,7	.450	11,4	.062-.125	1,6-3,2	1.210	30,7
.065	1,7	.220	5,6	**H-M4802**	RSCG 500								
.105	2,7	.312	7,9	**H-M4806**	SCG 625	.625	15,9	.550	14,0	.062-.125	1,6-3,2	1.300	33,0
.065	1,7	.187	4,8	**H-M4808**	RSCG 625								
.230	5,8	.395	10,0	**H-M4812**	SCG 750	.750	19,1	.660	16,8	.062-.125	1,6-3,2	1.480	37,6
.069	1,8	.250	6,4	**H-M4814**	RSCG 750								
.170	4,3	.450	11,4	**H-M4818**	SCG 875	.875	22,2	.770	19,6	.062-.125	1,6-3,2	1.460	37,1
.095	2,4	.260	6,6	**H-M4820**	RSCG 875								
.260	6,6	.546	13,9	**H-M4824**	SCG 1000	1.000	25,4	.875	22,2	.062-.125	1,6-3,2	1.620	41,1
.180	4,6	.440	11,2	**H-M4826**	RSCG 1000								
.485	12,3	.709	18,0	**H-M4830**	SCG 1093	1.093	27,8	.970	24,6	.062-.125	1,6-3,2	1.750	44,5
.250	6,4	.485	12,3	**H-M4832**	RSCG 1093								
.485	12,3	.709	18,0	**H-M4836**	SCG 1125	1.125	28,6	1.000	25,4	.062-.125	1,6-3,2	1.750	44,5
.250	6,4	.485	12,3	**H-M4838**	RSCG 1125								
.590	15,0	.920	23,4	**H-M4842**	SCG 1250	1.250	31,8	1.125	28,6	.062-.125	1,6-3,2	2.050	52,1
.490	12,4	.787	20,0	**H-M4844**	RSCG 1250								
.590	15,0	1.000	25,4	**H-M4848**	SCG 1375	1.375	34,9	1.250	31,8	.062-.125	1,6-3,2	2.050	52,1
.490	12,4	.787	20,0	**H-M4850**	RSCG 1375								
.865	22,0	1.180	30,0	**H-M4854**	SCG 1500	1.500	38,1	1.375	34,9	.062-.125	1,6-3,2	2.228	56,6
.787	20,0	1.020	25,9	**H-M4856**	RSCG 1500								
.865	22,0	1.260	32,0	**H-M4860**	SCG 1750	1.750	44,5	1.625	41,3	.062-.125	1,6-3,2	2.280	57,9
.787	20,0	1.020	25,9	**H-M4862**	RSCG 1750								
1.230	31,2	1.560	39,6	**H-M4866**	SCG 2000	2.000	50,8	1.875	47,6	.062-.125	1,6-3,2	2.410	61,2
1.000	25,4	1.240	31,5	**H-M4868**	RSCG 2000								
1.450	36,8	1.560	39,6	**H-M4872**	SCG 2375	2.375	60,3	2.250	57,2	.062-.125	1,6-3,2	2.500	63,5
1.160	29,5	1.350	34,3	**H-M4874**	RSCG 2375								

Standard color black.





SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

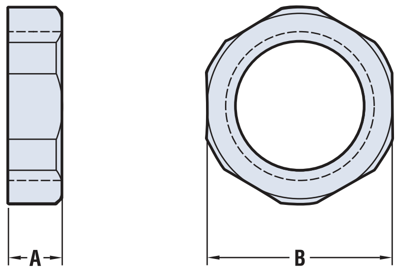
Materials	**6/6 Nylon w/Buna N Sealing Gland**
Certifications	**Ⓤ Listed under Underwriters’ Laboratories File E51579**
Flammability Rating	**94V-2**
Temperature Rating	**-22°F (-30°C) to 212°F**

Heyco® Nylon Locknuts

NPT Thread

Straight NPS threads for use with NPT threaded fittings.

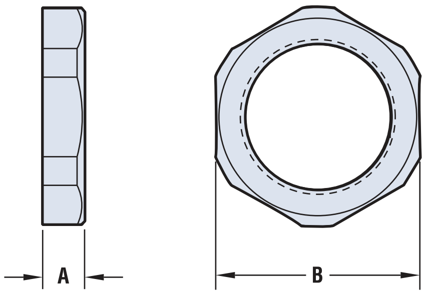
THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
				A Thickness		B Wrenching Flats	
	Black	Grey		in.	mm.	in.	mm.
1/4 NPT	**H-M9142**	**H-M9143**	NLN 1/4 NPT	.265	6,7	.748	19,0
3/8 NPT	**H-8461**	**H-8462**	NLN 3/8 NPT	.265	6,7	1.058	26,9
1/2 NPT	**H-8463**	**H-8464**	NLN 1/2 NPT	.265	6,7	1.058	26,9
3/4 NPT	**H-8465**	**H-8466**	NLN 3/4 NPT	.265	6,7	1.312	33,3
1 NPT	**H-8467**	**H-8468**	NLN 1 NPT	.265	6,7	1.605	40,8
1-1/4 NPT	**H-M9144**	**H-M9145**	NLN 1-1/4 NPT	.281	7,1	1.968	50,0
1-1/2 NPT	**H-M9150**	**H-M9151**	NLN 1-1/2 NPT	.320	8,1	2.750	69,9
2 NPT	**H-M9156**	**H-M9157**	NLN 2 NPT	.375	9,5	2.856	72,4



Standard colors black and gray.

PG Thread

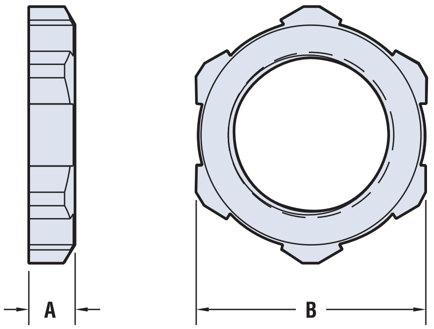
THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
				A Thickness		B Wrenching Flats	
	Black	Grey		in.	mm.	in.	mm.
PG 7	**H-3165**	**H-3166**	NLN PG 7	.218	5,5	.750	19,1
PG 9	**H-3167**	**H-3168**	NLN PG 9	.218	5,5	.859	21,8
PG 11	**H-3169**	**H-3170**	NLN PG 11	.218	5,5	.937	23,8
PG 13.5	**H-3171**	**H-3172**	NLN PG 13.5	.250	6,4	1.062	27,0
PG 16	**H-3173**	**H-3174**	NLN PG 16	.250	6,4	1.171	29,7
PG 21	**H-3175**	**H-3176**	NLN PG 21	.281	7,1	1.406	35,7
PG 29	**H-3177**	**H-3178**	NLN PG 29	.281	7,1	1.812	46,0
PG 36	**H-M9146**	**H-M9147**	NLN PG 36	.281	7,1	2.244	56,9
PG 42	**H-M9152**	**H-M9153**	NLN PG 42	.320	8,1	2.750	69,9
PG 48	**H-M9158**	**H-M9159**	NLN PG 48	.375	9,5	2.850	72,4



Standard colors black and gray.

Metric Thread

THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
				A Thickness		B Wrenching Flats	
	Black	Grey		in.	mm.	in.	mm.
M12	**H-M9130**	**H-M9131**	NLN M12	.218	5,5	.750	19,1
M16	**H-M9132**	**H-M9133**	NLN M16	.218	5,5	.870	22,1
M20	**H-M9134**	**H-M9135**	NLN M20	.245	6,2	1.062	27,0
M25	**H-M9136**	**H-M9137**	NLN M25	.278	7,1	1.378	35,0
M32	**H-M9138**	**H-M9139**	NLN M32	.281	7,1	1.614	41,0
M40	**H-M9140**	**H-M9141**	NLN M40	.281	7,1	1.968	50,0
M50	**H-M9148**	**H-M9149**	NLN M50	.320	8,1	2.750	69,9
M63	**H-M9154**	**H-M9155**	NLN M63	.375	9,5	2.850	72,4

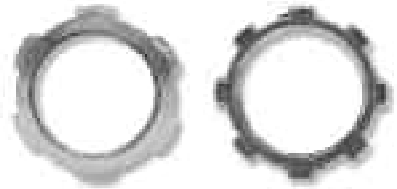


Standard colors black and gray.

Material	6/6 Nylon
Flammability Rating	94V-2–Consult Heyco for VO material
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

Quick Specs

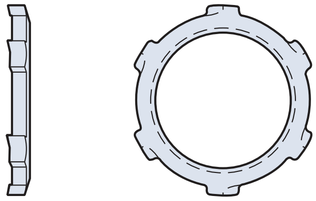
ISO 9001:2000 Certified
CERTIFICATE # 08-511



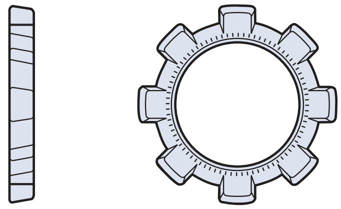
Heyco® Metal Locknuts

NPT Thread Locknuts

Straight NPS threads for use with NPT threaded fittings.



Stamped Steel Nut



Zinc Die-cast Nut

TYPE TRADE SIZE	STAMPED STEEL PART NO.	STAMPED STEEL DESCRIPTION	ZINC DIE-CAST PART NO.	ZINC DIE-CAST DESCRIPTION
1/2	**H-2250**	LN 1/2	**9800**	LN 1/2 DC
3/4	**H-2251**	LN 3/4	**9801**	LN 3/4 DC
1	**H-2252**	LN 1	**9802**	LN 1 DC
1-1/4	**H-9806**	LN 1-1/4	**9803**	LN 1-1/4 DC
1-1/2	**H-9807**	LN 1-1/2	**9804**	LN 1-1/2 DC
2	**H-9808**	LN 2	**9805**	LN 2 DC

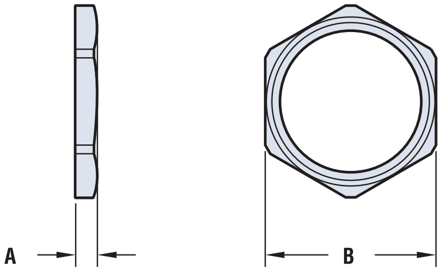
PG Thread Locknuts–Nickel Plated Brass

THREAD TYPE AND SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS A Thickness in.	A Thickness mm.	B Wrenching Flats in.	B Wrenching Flats mm.
PG 7	**H-2257**	LN PG 7	.110	2,8	.591	15,0
PG 9	**H-2258**	LN PG 9	.110	2,8	.709	18,0
PG 11	**H-2259**	LN PG 11	.118	3,0	.827	21,0
PG 13.5	**H-2260**	LN PG 13	.118	3,0	.906	23,0
PG 16	**H-2261**	LN PG 16	.118	3,0	1.024	26,0
PG 21	**H-2262**	LN PG 21	.138	3,5	1.261	32,0
PG 29	**H-2263**	LN PG 29	.158	4,0	1.615	41,0
PG 36	**H-2268**	LN PG 36	.197	5,0	2.009	51,0
PG 42	**H-2269**	LN PG 42	.197	5,0	2.364	60,0

- For use with Heyco-Flex™ Cordgripsand most electrical fittings.
- Nickel-plated brass finish over brass provides excellent corrosion resistance and durability.
- Metric sizes M6 through M50 accommodate a wide range of fittings.

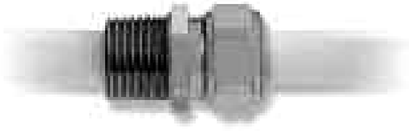
Metric Thread Locknuts–Nickel Plated Brass

THREAD TYPE AND SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS A Thickness in.	A Thickness mm.	B Wrenching Flats in.	B Wrenching Flats mm.
M6	**H-2243**	LN M6	.110	2,8	.354	9,0
M8	**H-2244**	LN M8	.110	2,8	.433	11,0
M10	**H-2245**	LN M10	.110	2,8	.512	13,0
M12	**H-2246**	LN M12	.118	3,0	.591	15,0
M16	**H-2247**	LN M16	.118	3,0	.748	19,0
M20	**H-2248**	LN M20	.138	3,5	.945	24,0
M25	**H-2249**	LN M25	.138	3,5	1.181	30,0
M32	**H-2253**	LN M32	.177	4,5	1.417	36,0
M40	**H-2254**	LN M40	.177	4,5	1.811	46,0
M50	**H-2255**	LN M50	.217	5,5	2.165	55,0



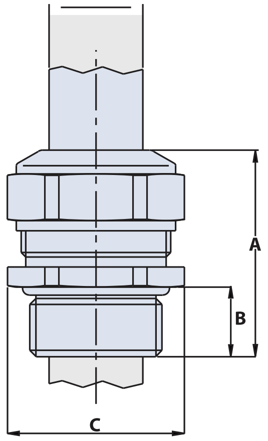
Heyco® Metal Liquid Tight Cordgrips NPT Hubs

Nickel-Plated Brass Construction for Superior Protection of Flexible Cables



CABLE DIA. RANGE				PART NO.	Thread Size	Clearance Hole		PART DIMENSIONS					
Minimum		Maximum						A Max. O.A. Length		B Thread Length		C Wrenching Flat Size	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.
.118	3,0	.157	4,0	**H-4560**	NPT 1/8	.445	11,3	.905	23,0	.315	8,0	.512	13,0
.157	4,0	.236	6,0	**H-4561**	NPT 1/8	.445	11,3	.905	23,0	.315	8,0	.512	13,0
.138	3,5	.197	5,0	**H-4562**	NPT 1/4	.540	13,7	1.142	29,0	.472	12,0	.591	15,0
.197	5,0	.256	6,5	**H-4563**	NPT 1/4	.540	13,7	1.142	29,0	.472	12,0	.591	15,0
.256	6,5	.315	8,0	**H-4564**	NPT 1/4	.540	13,7	1.142	29,0	.472	12,0	.591	15,0
.138	3,5	.177	4,5	**H-4565**	NPT 3/8	.670	17,0	1.260	32,0	.472	12,0	.709	18,0
.177	4,5	.236	6,0	**H-4566**	NPT 3/8	.670	17,0	1.260	32,0	.472	12,0	.709	18,0
.236	6,0	.315	8,0	**H-4567**	NPT 3/8	.670	17,0	1.260	32,0	.472	12,0	.709	18,0
.315	8,0	.413	10,5	**H-4568**	NPT 3/8	.670	17,0	1.260	32,0	.472	12,0	.709	18,0
.236	6,0	.315	8,0	**H-4569**	NPT 1/2	.875	22,2	1.417	36,0	.590	15,0	.945	24,0
.315	8,0	.433	11,0	**H-4570**	NPT 1/2	.875	22,2	1.417	36,0	.590	15,0	.945	24,0
.433	11,0	.590	15,0	**H-4571**	NPT 1/2	.875	22,2	1.417	36,0	.590	15,0	.945	24,0
.374	9,5	.492	12,5	**H-4572**	NPT 3/4	1.068	27,1	1.575	40,0	.590	15,0	1.181	30,0
.492	12,5	.630	16,0	**H-4573**	NPT 3/4	1.068	27,1	1.575	40,0	.590	15,0	1.181	30,0
.630	16,0	.807	20,5	**H-4574**	NPT 3/4	1.068	27,1	1.575	40,0	.590	15,0	1.181	30,0
.551	14,0	.669	17,0	**H-4575**	NPT 1	1.375	34,9	1.890	48,0	.787	20,0	1.417	36,0
.669	17,0	.827	21,0	**H-4576**	NPT 1	1.375	34,9	1.890	48,0	.787	20,0	1.417	36,0
.827	21,0	1.004	25,5	**H-4577**	NPT 1	1.375	34,9	1.890	48,0	.787	20,0	1.417	36,0
.787	20,0	.945	24,0	**H-4578**	NPT 1-1/4	1.680	42,7	2.008	51,0	.787	20,0	1.811	46,0
.945	24,0	1.122	28,5	**H-4579**	NPT 1-1/4	1.680	42,7	2.008	51,0	.787	20,0	1.811	46,0
1.122	28,5	1.299	33,0	**H-4580**	NPT 1-1/4	1.680	42,7	2.008	51,0	.787	20,0	1.811	46,0
1.142	29,0	1.299	33,0	**H-4581**	NPT 1-1/2	1.920	48,8	2.205	56,0	.866	22,0	2.165	55,0
1.299	33,0	1.457	37,0	**H-4582**	NPT 1-1/2	1.920	48,8	2.205	56,0	.866	22,0	2.165	55,0
1.457	37,0	1.614	41,0	**H-4583**	NPT 1-1/2	1.920	48,8	2.205	56,0	.866	22,0	2.165	55,0
1.378	35,0	1.575	40,0	**H-4584**	NPT 2	2.395	60,8	2.323	59,0	.866	22,0	2.756	70,0
1.575	40,0	1.811	46,0	**H-4585**	NPT 2	2.395	60,8	2.323	59,0	.866	22,0	2.756	70,0
1.811	46,0	2.047	52,0	**H-4586**	NPT 2	2.395	60,8	2.323	59,0	.866	22,0	2.756	70,0

- Multiple sizes for cable diameters ranging from .118˝ (3,0 mm) to 2.047˝ (52,0 mm).
- We recommend using the smallest cordgrip that accommodates your cable size.
- Nickel-plated finish over brass provides excellent corrosion resistance and durability.
- Long NPT threads provide additional threads for easy locknut assembly.
- Sealing gland is molded in Thermoplastic Polymer Elastomer Material.
- **Locknuts not included**.
  For metal locknut specifications or to order locknuts seperately, see page 2-21.



Material	Nickel-Plated Brass w/TPE sealing gland
Certifications	Ⓤ Certified by UL for Compliance with both Canadian and U.S. requirements Under File E51579. Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements.
Temperature Rating	-40°F (-40°C) to 248°F (120°C)
IP Rating	IP 68

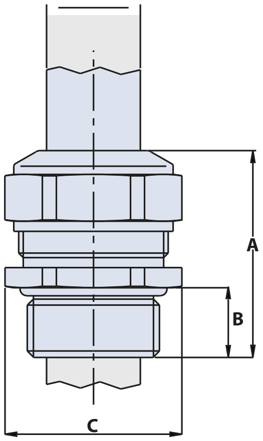
Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Metal Liquid Tight Cordgrips PG Hubs

Nickel-Plated Brass Construction for Superior Protection of Flexible Cables

- Nickel-plated finish over brass provides excellent corrosion resistance and durability.
- We recommend using the smallest cordgrip that accommodates your cable size.
- Sizes PG 7 through PG 42 accommodate various cable diameters.
- Long PG threads provide additional threads for easy locknut assembly.
- Sealing gland is molded in Thermoplastic Polymer Elastomer Material.
- **Locknuts not included**. For metal locknut specifications or to order locknuts seperately, see page 2-21.



CABLE DIA. RANGE				PART NO.	Thread Size	Clearance Hole		PART DIMENSIONS					
Minimum		Maximum						A Max. O.A. Length		B Thread Length		C Wrenching Flat Size	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.
.138	3,5	.197	5,0	**H-4530**	PG 7	.50	12,7	1.063	27,0	.394	10,0	.590	15,0
.197	5,0	.256	6,5	**H-4531**	PG 7	.50	12,7	1.063	27,0	.394	10,0	.590	15,0
.256	6,5	.315	8,0	**H-4532**	PG 7	.50	12,7	1.063	27,0	.394	10,0	.590	15,0
.138	3,5	.177	4,5	**H-4533**	PG 9	.61	15,5	1.181	30,0	.394	10,0	.709	18,0
.177	4,5	.236	6,0	**H-4534**	PG 9	.61	15,5	1.181	30,0	.394	10,0	.709	18,0
.236	6,0	.315	8,0	**H-4535**	PG 9	.61	15,5	1.181	30,0	.394	10,0	.709	18,0
.315	8,0	.413	10,5	**H-4536**	PG 9	.61	15,5	1.181	30,0	.394	10,0	.709	18,0
.157	4,0	.216	5,5	**H-4537**	PG 11	.748	19,0	1.220	31,0	.394	10,0	.827	21,0
.216	5,5	.335	8,5	**H-4538**	PG 11	.748	19,0	1.220	31,0	.394	10,0	.827	21,0
.335	8,5	.472	12,0	**H-4539**	PG 11	.748	19,0	1.220	31,0	.394	10,0	.827	21,0
.236	6,0	.315	8,0	**H-4540**	PG 13.5	.827	21,0	1.220	31,0	.394	10,0	.945	24,0
.315	8,0	.433	11,0	**H-4541**	PG 13.5	.827	21,0	1.220	31,0	.394	10,0	.945	24,0
.433	11,0	.590	15,0	**H-4542**	PG 13.5	.827	21,0	1.220	31,0	.394	10,0	.945	24,0
.236	6,0	.315	8,0	**H-4543**	PG 16	.906	23,0	1.220	31,0	.394	10,0	.945	24,0
.315	8,0	.433	11,0	**H-4544**	PG 16	.906	23,0	1.220	31,0	.394	10,0	.945	24,0
.433	11,0	.590	15,0	**H-4545**	PG 16	.906	23,0	1.220	31,0	.394	10,0	.945	24,0
.374	9,5	.492	12,5	**H-4546**	PG 21	1.142	23,0	1.457	37,0	.472	12,0	1.181	30,0
.492	12,5	.630	16,0	**H-4547**	PG 21	1.142	29,0	1.457	37,0	.472	12,0	1.181	30,0
.630	16,0	.807	20,5	**H-4548**	PG 21	1.142	29,0	1.457	37,0	.472	12,0	1.181	30,0
.630	16,0	.748	19,0	**H-4549**	PG 29	1.476	37,5	1.575	40,0	.472	12,0	1.496	38,0
.748	19,0	.905	23,0	**H-4550**	PG 29	1.476	37,5	1.575	40,0	.472	12,0	1.496	38,0
.905	23,0	1.083	27,5	**H-4551**	PG 29	1.476	37,5	1.575	40,0	.472	12,0	1.496	38,0
.846	21,5	1.024	26,0	**H-4552**	PG 36	1.858	47,2	1.850	47,0	.591	15,0	1.969	50,0
1.024	26,0	1.201	30,5	**H-4553**	PG 36	1.858	47,2	1.850	47,0	.591	15,0	1.969	50,0
1.201	30,5	1.378	35,0	**H-4554**	PG 36	1.858	47,2	1.850	47,0	.591	15,0	1.969	50,0
1.142	29,0	1.299	33,0	**H-4555**	PG 42	2.138	54,3	1.929	49,0	.591	15,0	2.156	55,0
1.299	33,0	1.457	37,0	**H-4556**	PG 42	2.138	54,3	1.929	49,0	.591	15,0	2.156	55,0
1.457	37,0	1.654	42,0	**H-4557**	PG 42	2.138	54,3	1.929	49,0	.591	15,0	2.156	55,0

Quick Specs

Material	**Nickel-Plated Brass w/TPE sealing gland**
Certifications	**Certified by UL for Compliance with both Canadian and U.S. requirements Under File E51579.** **Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements.**
Temperature Rating	**-40°F (-40°C) to 248°F (120°C)**
IP Rating	**IP 68**

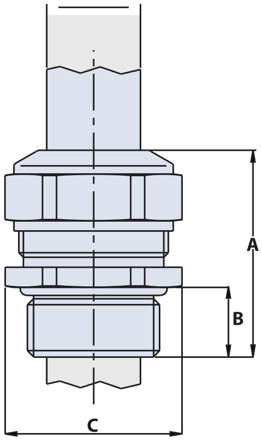
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco Metal Liquid Tight Cordgrips Metric Hubs

Nickel-Plated Brass Construction for Superior Protection of Flexible Cables

CABLE DIA. RANGE				PART NO.	Thread Size	Clearance Hole		PART DIMENSIONS					
Minimum		Maximum						A Max. O.A. Length		B Thread Length		C Wrenching Flat Size	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.
.079	2,0	.157	2,5	**H-4500**	M6 x 1	.25	6,5	.787	20,0	.315	8,0	.315	8,0
.098	2,5	.118	3,0	**H-4501**	M6 x 1	.25	6,5	.787	20,0	.315	8,0	.315	8,0
.118	3,0	.138	3,5	**H-4502**	M6 x 1	.25	6,5	.787	20,0	.315	8,0	.315	8,0
.098	2,5	.138	3,5	**H-4503**	M8 x 1,25	.33	8,5	.945	24,0	.394	10,0	.433	11,0
.138	3,5	.197	5,0	**H-4504**	M8 x 1,25	.33	8,5	.945	24,0	.394	10,0	.433	11,0
.118	3,0	.157	4,0	**H-4505**	M10 x 1,5	.41	10,5	.984	25,0	.394	10,0	.512	13,0
.157	4,0	.236	6,0	**H-4506**	M10 x 1,5	.41	10,5	.984	25,0	.394	10,0	.512	13,0
.138	3,5	.197	5,0	**H-4507**	M12 x 1,5	.50	12,5	1.063	27,0	.394	10,0	.591	15,0
.197	5,0	.256	6,5	**H-4508**	M12 x 1,5	.50	12,5	1.063	27,0	.394	10,0	.591	15,0
.256	6,5	.315	8,0	**H-4509**	M12 x 1,5	.50	12,5	1.063	27,0	.394	10,0	.591	15,0
.138	3,5	.177	4,5	**H-4510**	M16 x 1,5	.64	16,5	1.181	30,0	.394	10,0	.709	18,0
.177	4,5	.236	6,0	**H-4511**	M16 x 1,5	.64	16,5	1.181	30,0	.394	10,0	.709	18,0
.236	6,0	.315	8,0	**H-4512**	M16 x 1,5	.64	16,5	1.181	30,0	.394	10,0	.709	18,0
.315	8,0	.413	10,5	**H-4513**	M16 x 1,5	.64	16,5	1.181	30,0	.394	10,0	.709	18,0
.236	6,0	.315	8,0	**H-4514**	M20 x 1,5	.80	20,5	1.220	31,0	.394	10,0	.945	24,0
.315	8,0	.433	11,0	**H-4515**	M20 x 1,5	.80	20,5	1.220	31,0	.394	10,0	.945	24,0
.433	11,0	.590	15,0	**H-4516**	M20 x 1,5	.80	20,5	1.220	31,0	.394	10,0	.945	24,0
.374	9,5	.492	12,5	**H-4517**	M25 x 1,5	1.00	25,4	1.417	36,0	.433	11,0	1.181	30,0
.492	12,5	.630	16,0	**H-4518**	M25 x 1,5	1.00	25,4	1.417	36,0	.433	11,0	1.181	30,0
.630	16,0	.807	20,5	**H-4519**	M25 x 1,5	1.00	25,4	1.417	36,0	.433	11,0	1.181	30,0
.551	14,0	.669	17,0	**H-4520**	M32 x 1,5	1.27	32,5	1.614	41,0	.512	13,0	1.417	36,0
.669	17,0	.827	21,0	**H-4521**	M32 x 1,5	1.27	32,5	1.614	41,0	.512	13,0	1.417	36,0
.827	21,0	1.004	25,5	**H-4522**	M32 x 1,5	1.27	32,5	1.614	41,0	.512	13,0	1.417	36,0
.787	20,0	.945	24,0	**H-4523**	M40 x 1,5	1.59	40,5	1.732	44,0	.512	13,0	1.811	46,0
.945	24,0	1.122	28,5	**H-4524**	M40 x 1,5	1.59	40,5	1.732	44,0	.512	13,0	1.811	46,0
1.122	28,5	1.299	33,0	**H-4525**	M40 x 1,5	1.59	40,5	1.732	44,0	.512	13,0	1.811	46,0
1.142	29,0	1.299	33,0	**H-4526**	M50 x 1,5	1.99	50,5	1.890	48,0	.551	14,0	2.165	55,0
1.299	33,0	1.457	37,0	**H-4527**	M50 x 1,5	1.99	50,5	1.890	48,0	.551	14,0	2.165	55,0
1.457	37,0	1.654	42,0	**H-4528**	M50 x 1,5	1.99	50,5	1.890	48,0	.551	14,0	2.165	55,0

- Nickel-plated finish over brass provides excellent corrosion resistance and durability.
- We recommend using the smallest cordgrip that accommodates your cable size.
- Meets the New European standard EN 50262 version A for metric cordgrips.
- Metric sizes M6 thru M50 accommodate various cable diameters.
- Long metric threads provide additional threads for easy locknut assembly.
- Sealing gland is molded in Thermoplastic Polymer Elastomer Material.
- **Locknuts not included**. For metal locknut specifications or to order locknuts seperately, see page 2-21.



Material	**Nickel-Plated Brass w/TPE sealing gland**
Certifications	**Certified by UL for Compliance with both Canadian and U.S. requirements Under File E51579.** **Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements.**
Temperature Rating	**-40°F (-40°C) to 248°F (120°C)**
IP Rating	**IP 68**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

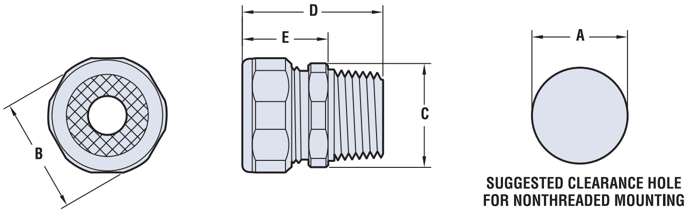
Heyco® Metal Liquid Tight Cordgrips NPT Hubs

Steel, for Flexible Cords

- Multiple sizes with 1/2˝ to 3/4˝ NPT hubs, cover a cable diameter range of .150˝ (3,8 mm) to .850˝ (21,6 mm).
- Compact design allows fittings to be consecutively ganged–no skipping knockouts–and occupy less “real estate.”
- Color coded label system identifies the cordgrips by wire range/grommet opening.
- Neoprene rubber grommet ensures a permanent rain-tight seal around the cable.
- Galvanized steel pressure ring prevents distortion of the grommet when the sealing nut is tightened.
- Body and sealing nut are made of corrosion resistant machined steel. Zinc plated with special brighteners for an attractive finish.
- Temperature Rating: 221°F (105°C).

CABLE DIA. RANGE Min. Dia. in.	mm.	Max. Dia. in.	mm.	PART NO.	DESCRIPTION	NPT HUB SIZE	PART DIMENSIONS A Clearance Hole in.	mm.	B Sealing Nut HEX in.	mm.	C Body Nut O.D. in.	mm.	D Overall Length* in.	mm.	E Exposed Length* in.	mm.
.150	3,8	.250	6,3	**H-9760**	CG 50A-250	1/2	.875	22,2	1.031	26,2	.937	23,8	1.312	33,3	.812	20,6
.250	6,3	.350	8,9	**H-9761**	CG 50A-350											
.350	8,9	.450	11,4	**H-9762**	CG 50A-450											
.450	11,4	.560	14,2	**H-9763**	CG 50A-560											
.550	14,0	.650	16,5	**H-9764**	CG 50A-650											
.150	3,8	.250	6,3	**H-9766**	CG 75A-250	3/4	1.109	28,2	1.031	26,2	1.172	29,8	1.312	33,3	.812	20,6
.250	6,3	.35	8,9	**H-9767**	CG 75A-350											
.350	8,9	.450	11,4	**H-9769**	CG 75A-450											
.450	11,4	.560	14,2	**H-9770**	CG 75A-560											
.550	14,0	.650	16,5	**H-9771**	CG 75A-650											
.650	16,5	.750	19,0	**H-9772**	CG 75B-750	3/4	1.109	28,2	1.250	31,7	1.187	31,2	1.562	39,7	1.031	26,2
.750	19,0	.850	21,6	**H-9773**	CG 75B-850											

*May vary slightly depending on cable diameter.

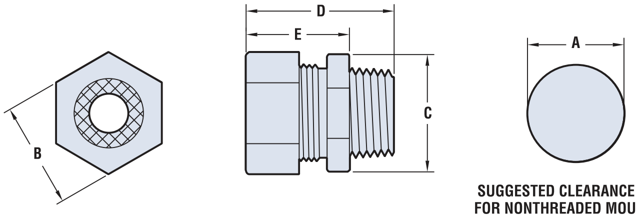


SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

- We recommend using the smallest maximum diameter range cordgrip that will fit your application.
- Cast from zinc alloy, Zamac #3.
- Temperature Rating: 140°F (60°C).

CABLE DIA. RANGE Min. Dia. in.	mm.	Max. Dia. in.	mm.	PART NO.	DESCRIPTION	NPT HUB SIZE	PART DIMENSIONS A Clearance Hole in.	mm.	B Sealing Nut HEX in.	mm.	C Body Nut O.D. in.	mm.	D Overall Length* in.	mm.	E Exposed Length* in.	mm.
.190	4,8	.250	6,3	**H-9776**	CG 11	1/2	.875	22,2	.970	24,6	.900	22,8	1.20	30,5	.80	20,3
.260	6,6	.375	9,5	**H-9777**	CG 12											
.375	9,5	.450	11,4	**H-9778**	CG 13											
.440	11,2	.560	14,2	**H-9779**	CG 21	3/4	1.109	28,2	1.20	30,5	1.10	27,9	1.27	32,3	.87	22,1
.500	12,7	.650	16,5	**H-9780**	CG 22											
.625	15,9	.725	18,4	**H-9781**	CG 23											

*May vary slightly depending on cable diameter.



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

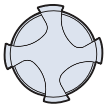
ISO 9001:2000 Certified
CERTIFICATE # 08-511

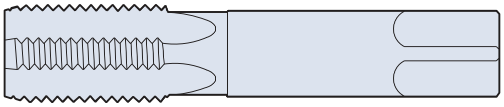
Heyco® PG Thread Taps

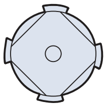
For Steel Conduit Threads per DIN 40430

THREAD TYPE AND SIZE	TAP DRILL DIAMETER mm.	DESCRIPTION	PART NO.		PART DIMENSIONS		
			Starting	Finishing	Major	Length	
					Diameter mm.	Overall mm.	Thread mm.
PG 7	11,5	PG-T 7	**H-0150**	**H-0151**	12,5	63,0	20,0
PG 9	14,0	PG-T 9	**H-0153**	**H-0154**	15,2	70,0	20,0
PG 11	17,3	PG-T 11	**H-0156**	**H-0157**	18,6	80,0	22,0
PG 13.5	19,0	PG-T 13.5	**H-0159**	**H-0160**	20,4	80,0	22,0
PG 16	21,3	PG-T 16	**H-0162**	**H-0163**	22,5	80,0	22,0
PG 21	27,0	PG-T 21	**H-0165**	**H-0166**	28,3	90,0	22,0
PG 29	35,5	PG-T 29	**H-0168**	**H-0169**	37,0	110,0	25,0

- Use a starting tap for through-hole applications.
- For blind holes, thread first with a starting tap; finish bottoming the threads with a finishing tap.
- Flank angle 80°
- Made of high-speed steel with ground threads for greater accuracy to assure optimum performance.
- Suitable for cutting alloy steel, bronze and stainless.



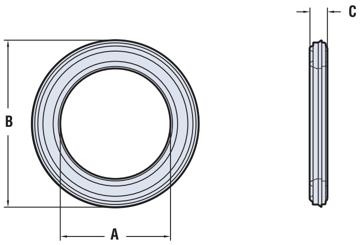




Heyco® Sealing Washers

FITS CONDUIT/ TUBING TRADE SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS					
			A Inside Diam.		B Outside Diam.		C Thickness	
			in.	mm.	in.	mm.	in.	mm.
1/4	**H-3258**	SW 1/4	.540	13,7	.796	20,2	.125	3,2
3/8	**H-3259**	SW 3/8	.670	17,0	1.010	25,5	.125	3,2
1/2	**H-3260**	SW 1/2	.820	20,8	1.240	31,5	.125	3,2
3/4	**H-3261**	SW 3/4	1.030	26,2	1.500	38,1	.135	3,4
1	**H-3262**	SW 1	1.281	32,5	1.770	45,0	.175	4,4
1-1/4	**H-3264**	SW 1-1/4	1.662	42,2	2.160	54,8	.160	4,1

Standard color black.



- For use with Heyco Liquid Tight Fittings and Liquid Tight Cordgrips.
- Liquid tight, dust tight, and oil tight at enclosure.
- Suitable for wet locations requiring a separate gasket between the box and fitting due to imperfections in the box.
- Also suitable for other panel or panel sealing applications.
- Easy to install since washers seal off on the perimeter, not on the connector threads.
- Special double sealing ridges compensate for minor unevenness at enclosure.

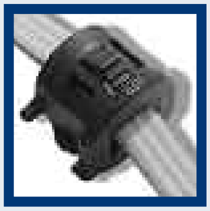
	Sealing Washers
Material	Thermoplastic Elastomer
Flammability Rating	94V-0

Quick Specs

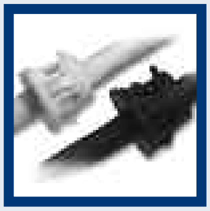
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Notes:

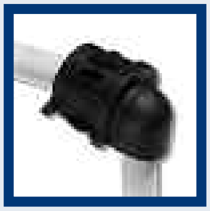
STRAIN RELIEF BUSHINGS



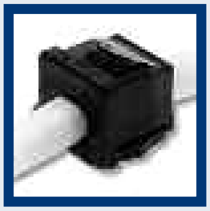
RDD Lockit Strain Relief Bushings, Flat Cables
3-1



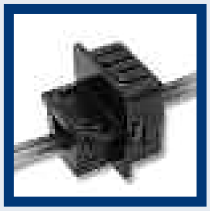
RDD Lockit Strain Relief Bushings, Round Cables
3-2, 3-3



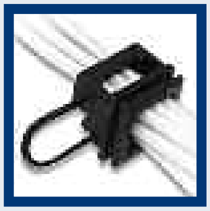
RDD Right Angle Lockit Strain Relief Bushings
3-4, 3-5



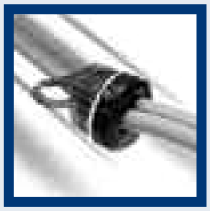
RDD Lockit Strain Relief Bushings (Round & Flat Cables)
3-6, 3-7



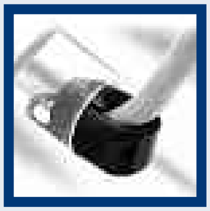
Multi Lockit Strain Reliefs (Round & Flat Cables) U Shape
3-8



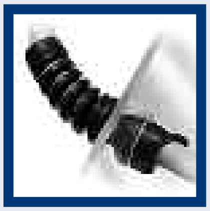
Lay-In & In-Line Strain Relief Bushings
3-9



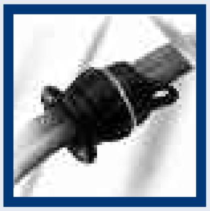
Straight-Thru Strain Relief Bushings
3-10, 3-11, 3-12, 3-13



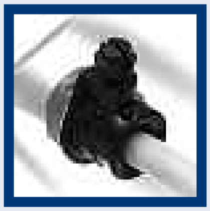
Right Angle Strain Relief Bushings
3-14, 3-15



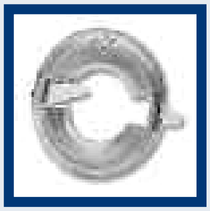
Pigtail Strain Relief Bushings
3-16



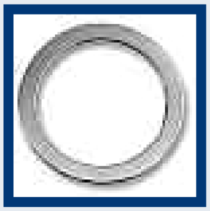
Bell-Mouth Strain Relief Bushings
3-17



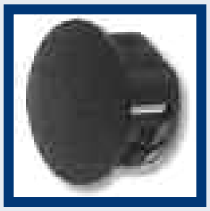
Euro Strain Relief Bushings
3-18, 3-19



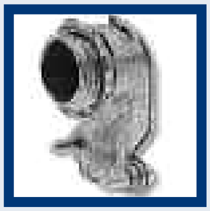
Knock-Out Adapters for Strain Relief Bushings
3-20



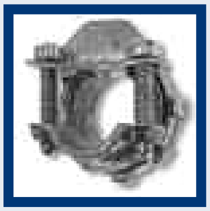
Back-Up Washer for Strain Relief Bushings & Metal Strain Relief
3-21



Strain Relief Mounting Hole Plugs
3-22



Zinc Die-Cast Box 90° Connectors
3-23



Zinc Die-Cast Box Connectors
3-23, 3-24

ESTCO
Strain Relief Bushings

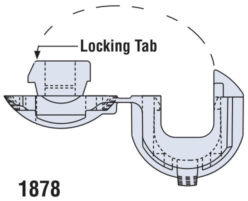
Heyco® RDD Lockit™ Strain Relief Bushings

For Flat Cables

- Automated application equipment speeds assembly and lowers costs while reducing or eliminating repetitive manual assembly motions.
- See page 3-1 for Heyco's Automated Pre-Assembly Equipment.
- Installs easily with fingertip pressure into a standard round or Double "D" hole. No clumsy hand tools required!
- Assembly friendly! Independent of insertion into the panel, RDD Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Multiple panel locking steps secure lockit strain relief into range of panel thicknesses.
- Consult ESTCO for other wire types and sizes.

WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
SPT-1	18/2 18/3	.12 x .22 .12 x .32	2,5 x 7,8 3,0 x 7,8	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1872**	RDD 100A
SPT-2 HPN	18/2 16/2	.12 x .32 .16 x .32	3,0 x 7,8 4,1 x 7,8	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1874**	RDD 100
HPN	16/3	.16 x .37	4,1 x 9,4	.875 w/ .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1878**	RDD 200
SPT-2	18/3 16/3	.15 x .40 .16 x .41	3,8 x 10,2 4,1 x 10,4						
SPT-3	18/2 18/3 16/2 16/3 14/2	.19 x .35 .19 x .39 .20 x .37 .20 x .43 .24 x .42	4,8 x 8,9 4,8 x 9,9 5,1 x 9,4 5,1 x 10,9 6,1 x 10,7						

Standard color black. Consult ESTCO for white and other colors.



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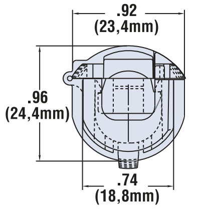
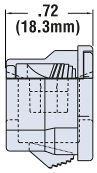
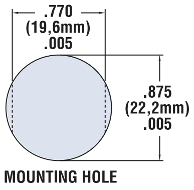






Quick Specs

Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E15331 Certified by the Canadian Standards Association File LR8919
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

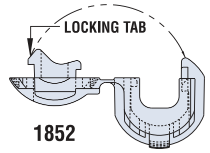
Heyco® RDD Lockit™ Strain Relief Bushings

For Round Cables

WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
SV & SVT	18/2	.220 .290	5,6 7,4	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1852**	RDD 101
AWN SJTO SJ	18/3	.130 .210	3,3 5,3	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1870**	RDD 101-A
SJTO SEOW	18/3	.290 .385	7,4 9,8	.875 w/ .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1857**	RDD 201
SJT SJO	18/3	.300 .330	7,6 8,4	.625 w/ .550 flats	15,9 w/ 14,0 flats	.062	1,6	**H-1800**	RDD 6N-2

Standard color black. Consult ESTCO for white and other colors.

- Automated application equipment speeds assembly to cable and lowers costs while greatly reducing the risk of Carpal Tunnel Syndrome.
- See page 3-1 for Heyco's Automated Pre-Assembly Equipment.
- Installs easily with fingertip pressure into a standard Double "D" hole. No clumsy hand tools required!
- Assembly friendly! Independent of insertion into the panel, RDD Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Multiple panel locking steps secure lockit strain relief into range of panel thicknesses.



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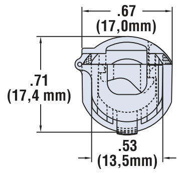

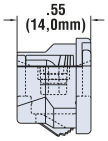

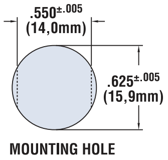

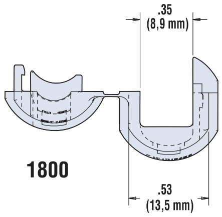

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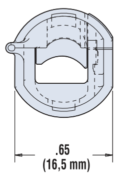
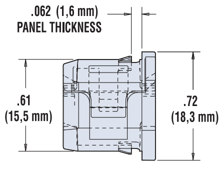
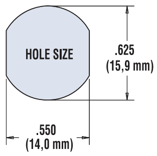






Material	6/6 Nylon
Certifications	Ⓡ Recognized under UL File E15331 (far exceeds UL's 35# pull out test).
Flammability Rating	94V-2
Material Temperature Index	275°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

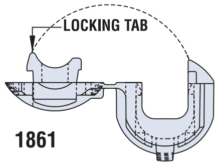
Heyco® RDD Lockit™ Strain Relief Bushings

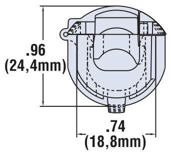
For Round Cables

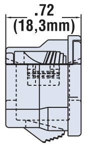
- Automated application equipment speeds assembly to cable and lowers costs while greatly reducing the risk of Carpal Tunnel Syndrome.
- See page 3-1 for Heyco's Automated Pre-Assembly Equipment.
- Installs easily with fingertip pressure into a standard Double "D" hole. No clumsy hand tools required!
- Assembly friendly! Independent of insertion into the panel, RDD Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Multiple panel locking steps secure lockit strain relief into range of panel thicknesses.

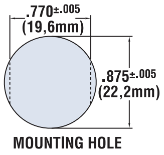
WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
SJ SJO	18/2 14/2	.340 .430	8,6 10,9	.875 w .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1861**	RDD 301
SJT	12/3	.420 .450	10,8 12,1	.875 w/ .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1865**	RDD 401
S SJT	12/3 14/3	.525 .600	13,5 15,2	1.109 w/ 1.000 flats	28,2 w/ 25,4 flats	.063 .099 .126 .157 .187	1,6 2,5 3,2 4,0 4,8	**H-1868**	RDD 501
S SJT	12/3 8/3	.600 .700	15,2 17,8	1.109 w/ 1.000 flats	28,2 w/ 25,4 flats	.063 .099 .126 .157 .187	1,6 2,5 3,2 4,0 4,8	**H-1802**	RDD 601

Standard color black. Consult ESTCO for white and other colors.









Quick Specs

Material	6/6 Nylon
Certifications	Recognized under UL File E15331 (far exceeds UL's 35# pull out test).
Flammability Rating	94V-2
Material Temperature Index	275°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

ISO 9001:2000 Certified
CERTIFICATE # 08-511

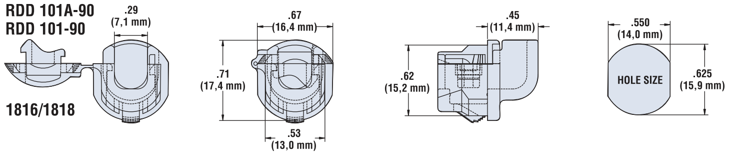
Heyco® RDD Right Angle Lockit™ Strain Relief Bushings

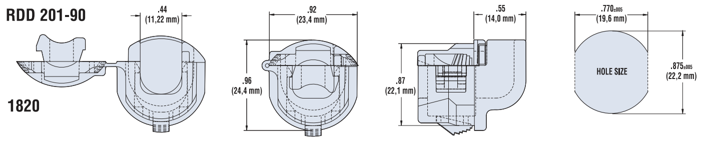
For Round Cables

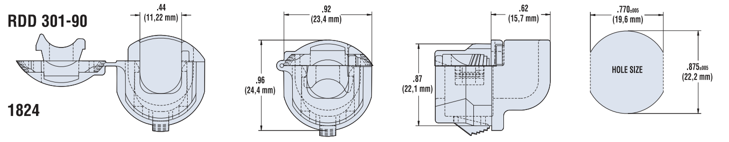
WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
AWM SJTO & SJO	18/2	.130 .210	3,3 5,3	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1816**	RDD 101A-90
SV SVT	18/3	.220 .290	5,6 7,4	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1818**	RDD 101-90
SJTO & SEO	18/2 18/3	.290 .385	7,4 9,8	.875 w/ .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1820**	RDD 201-90
SJ & SJO	18/2 14/2	.340 .430	8,6 10,9	.875 w/ .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1824**	RDD 301-90

Standard color black. Consult ESTCO for white and other colors.

- Automated application equipment speeds assembly and lowers costs while reducing or eliminating repetitive manual assembly motions.
- See page 3-1 for Heyco's Automated Pre-Assembly Equipment.
- Installs easily with fingertip pressure into a standard round or Double "D" hole. No clumsy hand tools required!
- Assembly friendly! Independent of insertion into the panel, RDD Right Angle Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Multiple panel locking steps secure lockit strain relief into range of panel thicknesses.
- Consult ESTCO for other wire types and sizes.


RDD 101A-90
RDD 101-90
1816/1818
.29
(7,1 mm)
.67
(16,4 mm)
.71
(17,4 mm)
.53
(13,0 mm)
.45
(11,4 mm)
.62
(15,2 mm)
.550
(14,0 mm)
HOLE SIZE
.625
(15,9 mm)


RDD 201-90
1820
.44
(11,22 mm)
.92
(23,4 mm)
.96
(24,4 mm)
.55
(14,0 mm)
.87
(22,1 mm)
.770±005
(19,6 mm)
HOLE SIZE
.875±005
(22,2 mm)


RDD 301-90
1824
.44
(11,22 mm)
.92
(23,4 mm)
.96
(24,4 mm)
.62
(15,7 mm)
.87
(22,1 mm)
.770±005
(19,6 mm)
HOLE SIZE
.875±005
(22,2 mm)

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E15331 (far exceeds UL's 35# pull-out test).** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

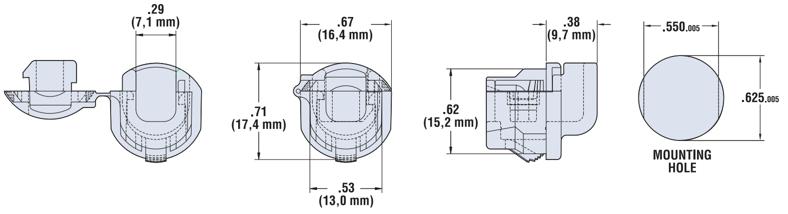
Heyco® RDD Right Angle Lockit™ Strain Relief Bushings

For Flat Cables

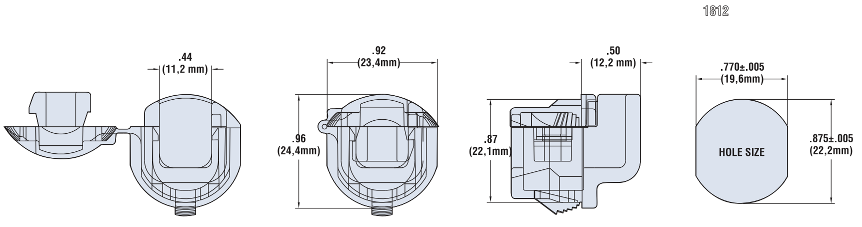
- Automated application equipment speeds assembly and lowers costs while reducing or eliminating repetitive manual assembly motions.
- Installs easily with fingertip pressure into a standard round or Double "D" hole.
- Assembly friendly! Independent of insertion into the panel, RDD Right Angle Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Multiple panel locking steps secure lockit strain relief into range of panel thicknesses.
- See page 3-22 for matching plugs which can be used to fill blank/unused mounting holes.

WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
SPT-1	18/2 18/3	.105 x .222 .116 x .315	2,7 x 5,6 2,9 x 8,0	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1806**	RDD 100A-90
HPN SPT-1 SPT-2	16/3 18/2 18/3	.116 x .315 .160 x .300	2,9 x 8,0 4,1 x 7,6	.625 w/ .550 flats	15,9 w/ 14,0 flats	.032 .040 .048 .063 .099	0,8 1,1 1,2 1,6 2,5	**H-1808**	RDD 100-90
HPN SPT-2 SPT-3	16/3 18/3 14/2	.160 x .370 .240 x .420	4,1 x 7,6 6,1 x 10,7	.875 w/ .770 flats	22,2 w/ 19,6 flats	.032 .063 .099 .126 .157	0,8 1,6 2,5 3,2 4,0	**H-1810**	RDD 200-90

Standard color black. Consult ESTCO for white and other colors.



1806/1808
RDD 100A-90
RDD 100-90



1810
RDD 200-90

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E15331 (far exceeds UL's 35# pull-out test).** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

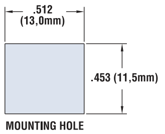
Heyco® Lockit™ Strain Relief Bushings
Strain Relief Bushings

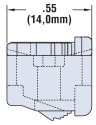
For Round Cables–Rectangular Mounting Hole

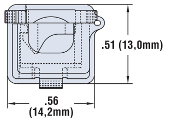
WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
	18/2	.220-	5,6-			.032	0,8		
		.245	6,2			.040	1,1		
SV & SVT	18/3	.250	6,4	.453 x .512	11,5 x 13,0	.048	1,2	**H-1832**	ST-101N
	18/3	.255	6,5			.063	1,6		
HPD	18/2	.270	6,9			.099	2,5		
	16/2	.290	7,4			.032	0,8		
HPD	16/2	.290	7,4			.040	1,1		
	18/2	.300	7,6			.048	1,2		
	16/2	.315	8,0			.063	1,6		
SJ, SJO	18/3	..320	8,1	.689 x .689	17,5 x 17,5	.099	2,5	**H-1836**	ST-201N
& SJT	16/2	.325	8,2			.032	0,8		
	18/3	.330	8,4			.063	1,6		
	14/2	.350	8,9			.099	2,5		
	16/3	.355	9.0			.126	3,2		
	18/4	.360	9,1			.157	4,0		
						.032	0,8		
SJT	14/2	.355	9,0			.063	1,6		
STO	16/3	.390	9,9	.689 x .689	17,5 x 17,5	.099	2,5	**H-1848**	ST-301N
SEOW-A	16/4	.420	10,6			.126	3,2		
						.157	4,0		

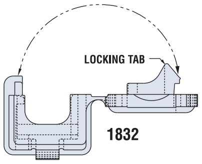
Standard color black. Consult ESTCO for white and other colors.

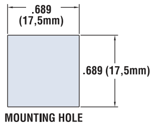
- Assembly friendly! Independent of insertion into the panel, Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Lockit Strain Reliefs hold so well they pass the UL pull-out test requirements with or without panel support.
- They protect the lifeline of your electric/electronic products by absorbing the forces of push and pull that may be exerted on the flexible power cord. And, their rectangular design eliminates the possibility of part rotation under forces of twist.
- Lockit's three finger design securely anchors into panels as thin as .032″ (0,8 mm) and as thick as .157″ (4,0 mm) for a neat, clean appearance. Five locking steps accommodate a wide range of panel thickness. Low profile head satisfies design aesthetics!

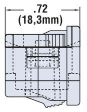


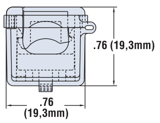


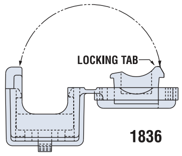








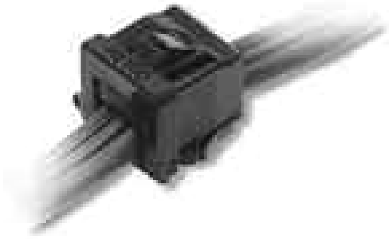




Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick
Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511



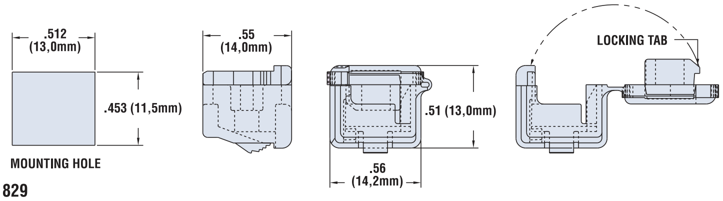
Heyco® Lockit™ Strain Relief Bushings

For Flat Cables–Rectangular Mounting Hole

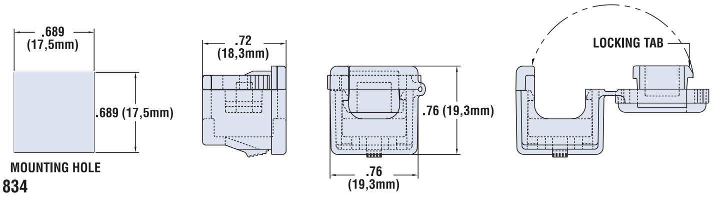
- Assembly friendly! Independent of insertion into the panel, Lockit Strain Reliefs self-lock onto the cable. Thus, they may be pre-assembled offline for final assembly at a later time or remote location, for lower installed cost!
- Lockit Strain Reliefs hold so well they pass the UL pullout test requirements with or without panel support.
- They protect the lifeline of your electric/electronic products by absorbing the forces of push and pull that may be exerted on the flexible power cord. And, their rectangular design eliminates the possibility of part rotation under forces of twist.
- Lockit's three finger design securely anchors into panels as thin as .032˝ (0,8 mm) and as thick as .157˝ (4,0 mm) for a neat, clean appearance. Five locking steps accommodate a wide range of panel thickness. Low profile head satisfies design aesthetics!
- Standardize panel design! Fill unused Lockit Strain Relief mounting holes with the Heyco Rectangular Plug RP 115-130 (See page 3-22).

WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO.	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness		Black	
		in.	mm.	in.	mm.	in.	mm.		
SPT-1	18/2	.12 x .22	3,0 x 5,6	.453 x .512	11,5 x 13,0	.032	0,8	H-1829	ST-100N
	18/3	.12 x .30	3,0 x 7,6			.040	1,0		
SPT-2 & HPN	18/2	.15 x .28	3,8 x 7,1			.048	1,2		
	16/2	.16 x .30	4,1 x 7,6			.063	1,6		
						.099	2,5		
HPN	16/3	.16 x .37	4,1 x 9,4	.689 x .689	17,5 x 17,5			H-1834	ST-200N
	18/3	.15 x .40	3,8 x 10,2						
SPT-2	16/3	.16 x .41	4,1 x 10,4			.032	0,8		
	18/2	.19 x .35	4,8 x 8.9			.063	1,6		
SPT-3	18/3	.19 x .39	4,8 x 9,9			.099	2,5		
	16/2	.20 x .37	5,1 x 9,4			.126	3,2		
	16/3	.20 x .43	5,1 x 10,9			.157	4,0		
	14/2	.24 x .42	6,1 x 10,7						
				.453 x .630	11,5 x 16,0	.032	0,8	H-1847	ST-100L
SPT-3	16/3	.032 x .099	0,8 x 2,5			.040	1,0		
HPN	18/3	.380 x .105	9,65 x 2,69			.048	1,2		
SPT2	18/2	.135 x .270	3,34 x 6,86			.063	1,6		
						.099	2,5		

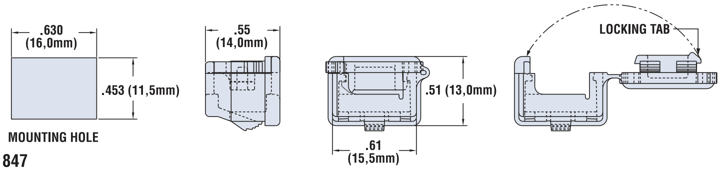
Standard color black. Consult ESTCO for white and other colors.



1829



1834



1847

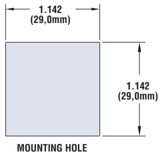
ISO 9001:2000 Certified
CERTIFICATE # 08-511

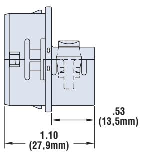
Heyco® Multi-Lockit™ Strain Reliefs

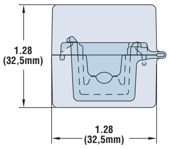
For Round or Flat Cables

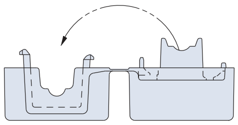
WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO. Black	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness			
		in.	mm.	in.	mm.	in.	mm.		
Round Cable Flat Cable SPT-3	18/3	.250 .173 x .380	6,4 4,39 x 9,65	1.142 x 1.142	29,0 x 29,0	.032	0,8	**H-1843**	LSR1939-300

Standard color black. Consult ESTCO for white and other colors.







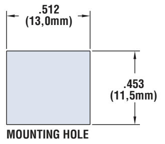


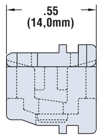
Heyco® Lockit™ Strain Reliefs for U-Shape Slot

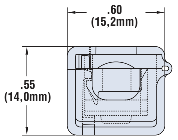
For Round Cables

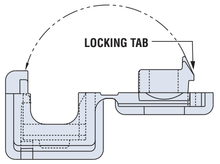
WILL FIT THESE CABLES				PANEL DIMENSIONS				PART NO. Black	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		Mounting Hole Size		Thickness			
		in.	mm.	in.	mm.	in.	mm.		
SV & SVT	18/2	.220	5,6	.453 x .512	11,5 x 13,0	062	1,6	**H-1839**	ST-101A
		.245	6,2						
	18/3	.250	6,4						
	18/3	.255	6,5						
HPD	18/2	.270	6,9						
	16/2	.290	7,4						

Standard color black. Consult ESTCO for white and other colors.









Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E15331 (far exceeds UL's 35# pull-out test).** **Canadian Certified by Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**275°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

- Assembly friendly! Independent of insertion into the panel, Lockit Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Large mounting hole design allows passage of plugs or bulky assemblies during Lockit installation.
- Lockit Strain Reliefs hold so well they pass the UL pull-out test requirements with or without panel support.
- They protect the lifeline of your electric/electronic products by absorbing the forces of push and pull that may be exerted on the flexible power cord. And, their rectangular design eliminates the possibility of part rotation under forces of twist.
- Fingertip pressure snaps the Lockit into the mounting hole.
- ST-101A designed to be installed in a "U" shape panel slot (see schematic). Securely anchors, insulates, and protects cables at panel entry point. Slim head profile makes Lockits design-specific.

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

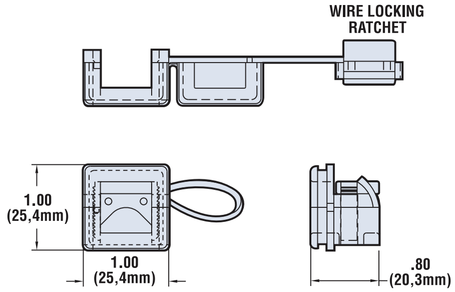
Heyco® Lay-In Strain Relief Bushing

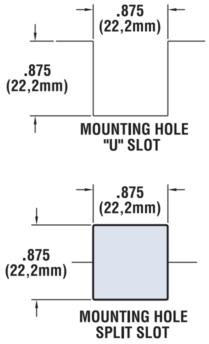
For Split Panel Mounting Holes

- Assembly friendly! Independent of insertion into the panel, Lay-In Strain Reliefs self-lock onto the cable. Thus, they may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Designed to be installed in split panel mounting hole or dropped into a slot (see schematic).
- Unique wire locking ratchet allows for generous wire range from .250″ (6,4 mm) to .600″ (15,2 mm).
- Protects against forces of pull, push, or twist.
- Can be used for one cable or bundles of cables (round or flat wire).

WILL FIT THESE CABLES			PANEL DIMENSIONS				PART NO. Black	DESCRIPTION	BODY LENGTH	
Cross Section	Approx. Size		Mounting Size		Thickness					
	in.	mm.	in.	mm.	in.	mm.			in.	mm.
Round, Flat or Multiple	up to .600	up to 15,2	.875 x .875	22,2 x 22,2	.100	2,5	**H-1266**	SR 8R-200	.800	20,3

Standard color black. Consult ESTCO for white and other colors.



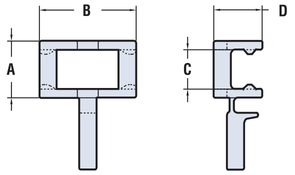


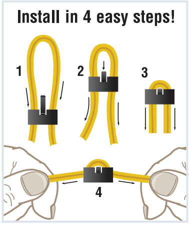
Heyco® In-Line Strain Relief Bushing

- Replaces “UL Knot” method of providing strain relief
- Quick and easy to secure on any SPT-2 wire.
- Cost effective. No cutting or tools needed as with metal clamp type strain reliefs. There is no risk of repetitive motion strain or injury.
- Recognized (far exceeds UL’s 35# pull-out test).
- UL Approved for use with SPT-2 Wire.

WILL FIT THESE CABLES				PART DIMENSIONS								PART NO. Black	DESCRIPTION
UL Type Designation	AWG Conductors	Approx. Size		A		B		C		D			
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
SPT-2	18/2	.150 x .280	3,8 x 7,1	.41	10,4	.70	17,8	.29	7,4	.35	8,9	**H-1854**	ISR 14-27

Standard color black. Consult ESTCO for white and other colors.
No panel required for application.




Install in 4 easy steps!

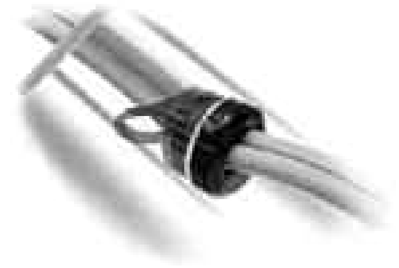
Quick Specs

Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters’ File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Straight-Thru Strain Relief Bushings

For Flat Cables, With Flex-Protecting Internal Radii and Extra Body Length



- Sizes for thin .040″ (1,0 mm) panel available: SR 4A-6 & SR 3A-4. See charts for details.
- Protects the lifeline of your electric/electronic products by absorbing the forces of pull, push, and twist that may be exerted on the flexible power cord.
- Securely anchors, insulates, and protects cable at panel entry points.
- Standardize panel design! Fill unused SR mounting holes with Heyco Double “D” Plugs.

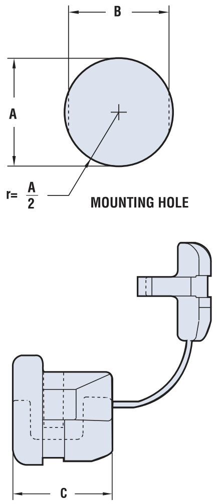
WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO. Black	DESCRIPTION	C BODY LENGTH	
UL Type Designation	AWG/ Conductors	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness					
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.
SPT-1	18/3	.12x.30	3,0x7,6	.500	12,7	.465	11,8	.040*	1,0	**H-1181**	SR 4A-6	.546	13,9
SPT-2 & HPN	18/2	.15x .28	3,8x7,1										
Same as SR-4A-6 above except								.062	1,6	**H-1187**	SR 4N-6	.546	13,9
Same as SR-4A-6 above except								.100	2,5	**H-1190**	SR 4K-6	.546	13,9

Standard color black. Consult ESTCO for white and other colors.

For Flat Cables

WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO. Black	DESCRIPTION	C BODY LENGTH	
UL Type Designation	AWG/ Conductors	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness					
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.
CLOCK	20/2	.09x.18	2,3x4,6	.375	9,5	.345	8,8	.062	1,6	**H-1017**	SR 2P-4	.406	10,3
SPT-1	18/2	.11x.21	2,8x5,3										
Same as SR 2P-4 above except								.125	3,2	**H-1034**	SR 2L-1	.406	10,3
SPT-1	18/2	.12x.22	3,0x5,6	.437	11,1	.390	9,9	.040*	1,0	**H-1074**	SR 3A-4	.406	10,3
Same as SR 3A-4 above except								.062	1,6	**H-1077**	SR 3P-4	.406	10,3
								.100	2,5	**H-1104**	SR 3W-1		
								.156	4,0	**H-1094**	SR 3L-1		
SPT-1	18/2	.12x.22	3,0x5,6	.500	12,7	.445	11,3	.100	2,5	**H-1130**	SR 4P-4	.440	11,2
SPT-1	18/3	.12x.30	3,0x7,6	.500	12,7	.465	11,8	.062	1,6	**H-1120**	SR 4N-4	.406	10,3
HPN	18/2	.15x.28	3,8x7,1										
Same as SR 4N-4 above except								.100	2,5	**H-1117**	SR 4K-4	.406	10,3
								.156	4,0	**H-1127**	SR 4L-4	.406	10,3
SPT-1	18/3	.12x.30	3,0x7,6	.500	12,7	.460	11,7	.095	2,4	**H-1114**	SR 4K-1	.500	12,7
SPT-2 & HPN	18/2	.15x.28	3,8x7,1										
HPN	18/3	.15x.34	3,8x8,6	.500- .515	12,7- 13,1								
SPT-2 & HPN	16/2	.16x.30	4,1x7,6										
Same as SR 4K-4 above except								.187	4,7	**H-1124**	SR 4L-1	.500	12,7
SPT-3	18/2	.19x.35	4,8x8,9	.562	14,3	.530	13,5	.062	1,6	**H-1170**	SR 5KN-4	.609	15,5
	16/2	.20x.37	5,1x9,43										
SPT-2	18/3	.15x.40	,8x10,2										
	16/3	.16x.41	4,1x10,4										
Same as SR 5KN-4 above except								.125	3,2	**H-1167**	SR 5K-4	.609	15,5

Standard color black. Consult ESTCO for white and other colors.

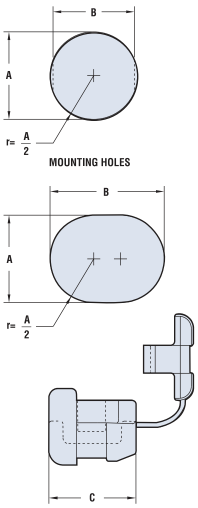


ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Straight-Thru Strain Relief Bushings

For Flat Cables

- Sizes SR 2 to SR6 for mounting hole diameters from .375˝ (9.5 mm) to .625˝ (15,9 mm).
- Protects the lifeline of your electric/electronic products by absorbing the forces of pull, push and twist that maybe exerted on the flexible power cord.
- Securely anchors, insulates, and protects cables and panel entry points.
- Standardize panel design! Fill unneeded SR mounting holes with Heyco Double "D" Plugs, page 3-22.



WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO. Black	DESCRIPTION	C BODY LENGTH	
UL Type Designation	AWG/ Conductors	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness					
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.
HPN &SPT-2	16/3	.16x.37	4,1x9,4	.562	14,3	.530	13,5	.125	3,2	**H-1174**	SR 5W-1	.609	15,5
	18/3	.15x.40	3,8x10,2										
	16/3	.16x.41	4,1x10,4										
SPT-2	18/3	.15x.40	3,8x10,2	.560*	14,2	.730*	18,5	.125	3,2	**H-1484**	SR 30-1*	.672	17,1
	16/3	.16x.41	4,1x10,4										
SPT-3	18/2	.19x.35	4,8x8,9										
	18/3	.19x.39	4,8x9,9										
	16/2	.20x.37	5,1x9,4										
	16/3	.20x.43	5,1x10,9										
SPT-2	18/3	.15x.40	3,0x7,6	.625	15,9	.550	14,0	.062	1,6	**H-1160**	SR 6N4-4	.578	14,7
	16/3	.16x.41	4,1x10,4										
Same as SR 6N4-4 above except →								.125	2,5	**H-1163**	SR 6P4-4	.578	14,7
SPT-3	16/2	.20x.37	5,1x9,4	.750*	19,0	.875*	22,2	.125	3,2	**H-1504**	SR 33-1*	.781	19,8
	16/3	.20x.43	5,1x10,9										
	14/2	.24x.42	6,1x10,7										
	14/3	.24x.51	6,1x12,9										
SPT-3	14/2	.24x.42	6,1x10,7	.875	22,2	.840	21,3	.125	3,2	**H-1517**	SR 34-2	.813	20,7
	14/3	.24x.51	6,1x12,9										
	12/2	.29x.51	7,4x12,9										
	12/3	.29x.65	7,4x16,5										
SPT-3	12/3	.32x.65	8,1x16,5	.875	22,2	.840	21,3	.125	3,2	**H-1497**	SR 31-2	.813	20,7
	10/3												
300 OHM=		.06x.40	1,5x10,2	.375	9,5	.625-.640*	15,9-16,3	.156	4,0	**H-1804**	SR 300-1*	.469	11,9
SPT-1	18/3	.12x.30	3,0x7,6	.375 .390	9,5 9,9								
SPT-2	18/3	.15x.40	3,8x10,2	.415 .422	10,5 10,7								
	16/3	.16x.41	4,1x10,4	.422 .437	10,7 11,1								
Same as SR 300-1 above except →								.100	2,5	**H-1814**	SR 302-1*	.469	11,9

Standard color black. Consult ESTCO for white and other colors.
= Wire is not UL/CSA covered.
*Use Elongated Hole.
1 Maximum Panel Thickness–Part has additional clearance.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

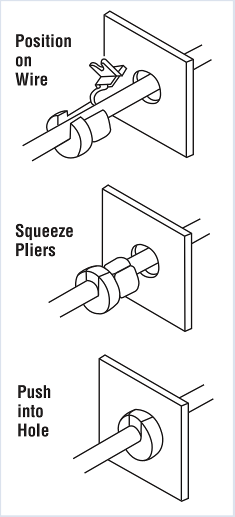
Heyco® Straight-Thru Strain Relief Bushings

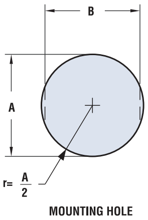
For Round Cables

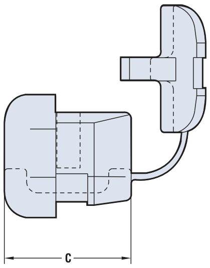
WILL FIT THESE CABLES UL Type Designation	AWG/ Conductors	Approx. Diameter in.	mm.	PANEL DIMENSIONS A Mounting Hole Dia. in.	mm.	B To Prevent Rotation in.	mm.	Maximum Panel Thickness in.	mm.	PART NO. Black	DESCRIPTION	C BODY LENGTH in.	mm.
AWM	—	.125-* .187	3,2- 4,8	.375	9,5	.330	8,4	.062	1,6	**H-1060**	SR 2M-1	.406	10,3
SV & SVT	18/2R	.220- .245	5,6 6,2	.500	12,7	.450	11,4	.062	1,6	**H-1157**	SR 5MN-3	.438	11,1
Same as SR 5MN-3 above except →								.100	2,5	**H-1140**	SR 5M-3	.438	11,1
SV & SVT	18/2	.250	6,4	.500	12,7	.450	11,4	.062	1,6	**H-1150**	SR 5N-4	.438	11,1
	18/3	.255	6,5	.500- .515	12,7 13,1								
HPD	18/2	.270	6,9	.500	12,7								
	16/2	.290	7,4	.500- .515	12,7 13,1								
Same as SR 5N-4 above except →								.100 .156	2,5 4,0	**H-1147** **H-1154**	SR 5P-4 SR 5L-1	.438	11,1
SV & SVT	18/3	.255	6,5	.500	12,7	.450	11,4	.100	2,5	**H-1137**	SR 5P3-4	.438	11,1
HPD	16/2	.290	7,4										
SJ, SJT & SJO	18/2	.300	7.6	.500	12,7	.465	11,8	.090	2,3	**H-1184**	SR 6W-1	.438	11,1
SJ, SJT & SJO	18/2	.300	7,6	.625	15,9	.550	14,0	.062	1,6	**H-1217**	SR 6N-4	.578	14,7
Same as SR 6N-4 above except →								.125	3,2	**H-1210**	SR 6P-4	.578	14,7
SJ, SJT & SJO	16/2	.325	8,3	.625	15,9	.550	14,0	.062	1,6	**H-1200**	SR 6N3-4	.578	14,7
	18/3	.330	8,4										
	14/2	.350	8,9										
	16/3	.355	9,0										
	18/4	.360	9,1										
Same as SR 6N3-4 above except →								.125	3,2	**H-1207**	SR 6P3-4	.578	14,7
SJ, SJT & SJO	18/2	.300	7,6	.625	15,9	.550	14,0	.156	4,0	**H-1214**	SR 6L-1	.678	17,2
	16/2	.325	8,3	.656	16,7								
	18/3	.330	8,4	.656	16,7								
	16/3	.355	9,0	.687	17,4								

Standard color black. Consult ESTCO for white and other colors.
*AWG cable only.
1 Maximum Panel Thickness–Part has additional clearance.

- Sizes SR2 to SR6 for mounting hole diameters from .375″ (9.5 mm) to .687″ (17.4 mm)
- Protects the lifeline of your electric/electronic products by absorbing the forces of pull, push and twist that maybe exerted on the flexible power cord.
- Securely anchors, insulates, and protects cables and panel entry points.
- Standardize panel design! Fill unneeded SR mounting holes with Heyco Double "D" Plugs, page 3-22.







Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

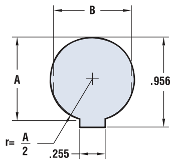
Heyco® Straight-Thru Strain Relief Bushings

For Round Cables

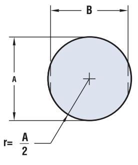
- Sizes SR7 to SR9 for mounting hole diameters from .750″ (19,0 mm) to 1.187″ (28,6 mm).
- Protects the lifeline of your electric/electronic products by absorbing the forces of pull, push, and twist that may be exerted on the flexible power cord.
- Securely anchors, insulates, and protects cables at panel entry points.
- Standardize panel design! Fill unneeded SR mounting holes with Heyco Double “D” Plugs, page 3-22.
- Sizes for thin .062″ (1,6 mm) panel available:
  SR 7N-2
  SR 8N-2
  See chart for details.

WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO. Black	DESCRIPTION	C BODY LENGTH	
UL Type Designation	AWG/ Conductors	Approx. Diameter		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness					
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.
SJT	18/4	.360	9,1	.750	19,0	.660	16,8	.062	1,6	**H-1244**	SR 7N-2	.750	19,1
	14/3	.370	9,4										
S & ST	18/2	.390	9,9										
	18/3	.405	10,3										
	16/2	.405	10,3										
	16/3	.430	10,9	.750-.781	19,0-19,8								
Same as SR 7N-2 above except →								.125	3,2	**H-1237**	SR 7P-2	.750	19,1
SJ, SJT & SJO	16/2	.325	8,3	.875	22,2	.770	19,6	.125	3,2	**H-1240**	SR 7K-2	.750	19,1
	18/3	.330	8,4										
	14/2	.350	8,9										
	16/3	.355	9,0										
	18/4	.360	9,1										
Same as SR 7K-2 above except				See Schematic						**H-1271**	SR 7KR-2	.750	19,1
SJT	14/3	.370	9,4	.875	22,2	.770	19,6	.125	3,2	**H-1247**	SR 7W-2	.750	19,1
	12/3	.425	10,8										
S & ST	18/2	.390	9,9										
	18/3	.405	10,3										
	16/2	.405	10,3										
	16/3	.430	10,9										
Same as SR 7W-2 above except →								.200	5,1	**H-1250**	SR 7L-2	.750	19,1
SJT	12/3	.425-.475	10,8-12,1	.875	22,2	.840	21,3	.125	3,2	**H-1497**	SR 31-2	.812	20,6
S & ST	14/2	.530	13,5	.875	22,2	.840	21,3	.062	1,6	**H-1254**	SR 8N-2	.828	21,0
	14/3	.560	14,2										
	12/2	.600	15,3										
Same as SR 8N-2 above except →								.125	3,2	**H-1260**	SR 8P-2	.812	20,6
								.187	4,8	**H-1274**	SR 8L-1		
S	12/2	.600	15,2	1.093	27,7	1.000	25,4	.281	7,1	**H-1287**	SR 9P-2	1.00	25,4
	12/3	.635	16,1	1.125	28,6								
	10/2	.640	16,3	1.093	27,7								
S, ST& SO	10/3	.690	17,5	1.187	28,6								

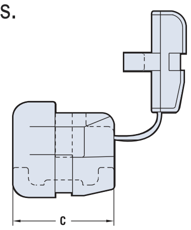
Standard color black. Consult Heyco for white and other colors.
1Maximum Panel Thickness–Part has additional clearance.



FOR SR-7KR-2 ONLY



STANDARD MOUNTING HOLES



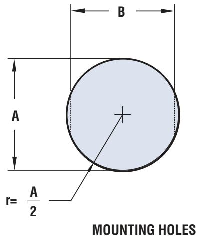
Heyco® Right Angle Strain Relief Bushings

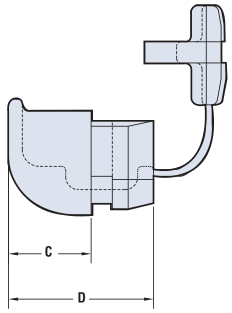
For Round Cables

WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO.	DESC.	PART DIMENSIONS			
UL Type Designation	AWG/ Conductors	Approx. Diameter		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness		Black		C HEAD LENGTH		D BODY LENGTH	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
SV & SVT	18/2	.250	6,3	.500	12,7	.450	11,4	.100	2,5	**H-1374**	SR 15-1	.390	9,9	.687	17,5
	18/3	.265	6,7	.500- .515	12,7 13,1										
HPD	18/2	.270	6,9	.500	12,7										
	16/2	.290	7,4	.500- .515	12,7- 13,1										
SJ, SJT & SJO	18/2	.300	7,6	.625	15,9	.550	14,0	.125	3,2	**H-1320**	SR 10-2	.562	14,3	.968	24,6
	16/2	.325	8,3												
	18/3	.330	8,4												
	16/3	.330	8,4												
SJ, SJT & SJO	16/2	.325	8,3	.625	15,9	.550	14,0	.125	3,2	**H-1327**	SR 11-2	.562	14,3	.968	24,6
	18/3	.330	8,4												
	16/3	.355	9,0												
Same as SR 11-2 above except →								.200	5,1	**H-1330**	SR 11K-2	.562	14,3	.968	24,6
SJT	18/4	.360	9,1			.660	16,8	.125	3,2	**H-1397**	SR 17-2	.640	16,3	1.093	27,7
	14/3	.370	9,4												
S & ST	18/2	.390	9,9	.750	19,0										
	18/3	.405	10,3												
	16/2	.405	10,3												
	16/3	.430	10,9	.750- .781	19,0- 19,8										

Standard color black. Consult ESTCO for white and other colors.
[1] Maximum Panel Thickness–Part has additional clearance.

- Provides the same protection for your power supply cable as the straight-thru type AND...
- Exits the cable flush against the panel, saving space and directing the cable parallel to the panel.
- Overcomes space limitations and acts as a back or bottom bumper.
- Standardize panel design! Fill unused SR mounting holes with Heyco Double "D" Plugs, page 3-22.





Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

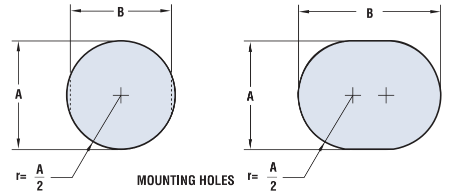
Heyco® Right Angle Strain Relief Bushings

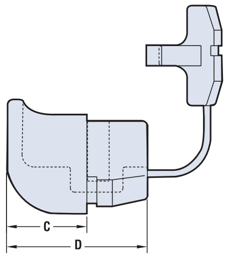
For Flat Cables

- Provides the same protection for your power supply cable as the straight-thru type AND...
- Exits the cable flush against the chassis, saving space and directing the cable parallel to the panel.
- Overcomes space limitations and acts as a back or bottom bumper.
- Standardize panel design! Fill unused SR mounting holes with Heyco Double "D" Plugs, page 3-22.

WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO. Black	DESC.	C HEAD LENGTH		D BODY LENGTH	
UL Type Designation	AWG/ Conductors	Approx. Diameter		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness							
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
SPT-1	18/2	.12x.22	3,0x5,6	.437	11,1	.390	9,9	.062	1,6	**H-1354**	SR 13-1	.234	5,9	.500	12,7
SPT-1	18/3	.12x.30	3,0x7,6	.500	12,7	.450	11,4	.040	1,0	**H-1361**	SR 14A-1	.390	9,9	.687	17,5
SPT-2	18/2	.15x.28	3,8x7,1												
HPN	16/2	.16x.30	4,1x7,6												
Same as SR 14A-1 above except →								.100	2,5	**H-1364**	SR 14-1	.390	9,9	.687	17,5
SPT-2	18/3	.15x.40	3,8x10,2	.562	14,3	.525	13,3	.125	3,2	**H-1384**	SR 16-1	.500	12,7	.859	21,8
SPT-3	18/2	.19x.35	4,8x8,9												
	16/2	.20x.37	5,1x9,4												
HPN	16/3	.16x.37	4,1x9,4												
SPT-2	18/3	.15x.40	3,8x10,2	.560 **	14,2 **	.730**	18,5 **	.080	2,0	**H-1424**	SR 20-1**	.406	10,3	.812	20,6
S	16/3	.16x.41	4,1x10,4												
PT-3	18/2	.19x.35	4,8x8,9												
	18/3	.19x.39	4,8x8,9												
	16/2	.20x.37	5,1x9,4												
	16/3	.20x.43	5,1x10,9												
Same as SR 20-1 above except →								.125	3,2	**H-1434**	SR 20L-1**	.406	10,3	.812	20,6
SPT-3	16/2	.20x.37	5,1x9,4	.750 **	19,9 **	.875**	22,2 **	.125	3,2	**H-1454**	SR 23-1**	.484	12,3	.937	23,8
	16/3	.20x.43	5,1x10,9												
	14/2	.24x.42	6,1x10,7												
	14/3	.24x.51	6,1x13,0												
SPT-3	14/2	.24x.42	6,1x10,7	.875	22,2	.840	21,3	.125	3,2	**H-1464**	SR 24-1	.500	12,7	.968	24,6
	14/3	.24x.51	6,1x13,0												
	12/2	.29x.51	7,4x13,0												
	12/3	.29x.65	7,4x16,5												
SPT-3	10/3	.32x.66	8,0x16,8	1.093	28,0	1.000	25,4	.125	3,2	**H-1440**	SR 21-2	.734	18,6	1.437	36,5

Standard color black. Consult ESTCO for white and other colors.
**Use elongated hole.
1Maximum Panel Thickness–Part has additional clearance.





Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Pigtail™ Strain Relief Bushings

For Flat Cables, With Integral Nylon Spring

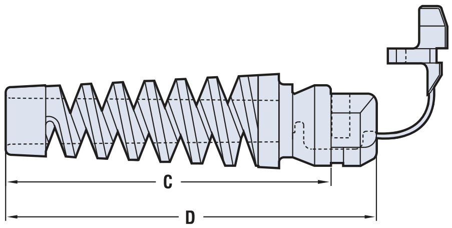
WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS			
UL Type Designation	AWG/ Conductors	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness		Black		C ESTENSION LENGTH		D BODY LENGTH	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
SPT-1	18/3	.12X.30	3,0X7,6	.500	12,7	.465	11,8	.062	1,6	**H-1541**	SR 4N-7	1.718	43,6	1.984	50,4
SPT-2 & HPN	18/2	.15x.28	3,8x7,1												

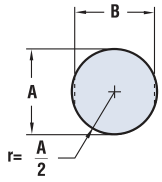
Standard color black. Consult ESTCO for white and other colors.
1 Maximum Panel Thickness–Part has additional clearance.

For Round Cables, With Integral Nylon Spring

WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS			
UL Type Designation	AWG/ Conductors	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness		Black		C ESTENSION LENGTH		D BODY LENGTH	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
SV &SVT	18/2	.250	6,4	.500	12,7	.450	11,4	.062	1,6	**H-1590**	SR 5N-7	1.703	43,3	1.984	50,4
	18/3	.255	6,5	.500-.515	12,7-13,1										
HPD	18/2	.270	6,9	.500	12,7										
	16/2	.290	7,4	.500-.515	12,7-13,1										
Same as SR 5N-7 above except →								.125	3,2	**H-1593**	SR 5P-7	1.703	43,3	1.984	50,4
SJ, SJO & SJT	18/2	.300	7,6	.625	15,9	.550	14,0	.062	1,6	**H-1596**	SR 6N-7	1.718	43,6	2.109	53,6
Same as SR 6N-7 above except →								.125	3,2	**H-1602**	SR 6P-7	1.718	43,6	2.109	53,6
SJ, SJO & SJT	16/2	.315	8,0	.625	15,9	.550	14,0	.062	1,6	**H-1599**	SR 6N3-7	1.718	43,6	2.109	53,6
	18/3	.320	8,1												
	14/2	.350	8,9												
	16/3	.355	9,0												
	18/4	.360	9,1												
Same as SR 6N3-7 above except →								.125	3,2	**H-1605**	SR 6P3-7	1.718	43,6	2.109	53,6
SJT	18/4	.360	9,1	.750	19,0	.660	16,8	.125	3,2	**H-1611**	SR 7P-7	2.156	54,9	2.598	66,0
	14/3	.370	9,4												
S & ST	18/2	.390	9,9												
	18/3	.405	10,3												
	16/2	.405	10,3												
	16/3	.430	10,9	.750-.781	19,0-19,8										

- Protects the lifeline of your electric/electronic products by absorbing forces of pull, push, twist, and flex.
- Securely anchors, insulates, and protects cables at panel entry points.
- Integral nylon spring eases the cable into a lazy bend; prevents sharp bending and assures longest cable and product life.
- Not recommended for applications where the power supply cord is subject to whipping or "jump rope" type motion.
- Adds reliability, longevity, and safety. Will pass CSA's 50,000 cycle "vacuum cleaner" test (C22.2 No. 67).
- Standardize panel design! Fill unusedSR mounting holes with Heyco Double "D" Plugs, page 3-22.





MOUNTING HOLE

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331**
	Certified by the Canadian Standards Association File LR8919.
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Bell-Mouth Strain Relief Bushings

For Flat Cables

- Protects the lifeline of your electric/electronic products by absorbing forces of pull, push, twist, and flex.
- Securely anchors, insulates, and protects cable at panel entry points.
- Flared "trumpet" exit eases the cable into a lazy bend, prevents sharp bending, and assures longer cable and product life.

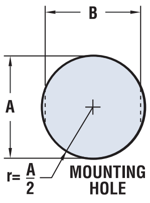
WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS			
UL Type Designation	AWG/ Conductors	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness		Black		C ESTENSION LENGTH		D BODY LENGTH	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
CLOCK	20/2	.09x.18	2,3x4,6	.375	9,5	.330	8,4	.062	1,6	**H-1020**	SR 2P-5	.375	9,5	.625	15,9
SPT2	18/2	.11x.21	2,8x5,3												
SPT-1	18/2	.12x.22	3,0x5,6	.437	11,1	.390	9,9	.062	1,6	**H-1080**	SR 3P-5	.375	9,5	.625	15,9
SPT-1	18/3	.12x.30	3,0x7,6	.500	12,7	.465	11,8	.062	1,6	**H-1108**	SR 4N-5	.406	10,3	.703	17,9
SPT-2& HPN	18/2	.15x.28	3,8x7,1	.500	12,7										
	16/2	.16x.30	4,1x7,6	.500 .515	12,7 13,1										
HPN	18/3	.15x.34	3,8x8,6	.625	15,9	.550	14,0	.125	3,2	**H-1229**	SR 6K-5	.421	10,7	.813	20,7
	16/3	.16x.37	4,1x9,4												
SPT-2	16/2	.16x.30	4,1x7,6												
	16/3	.16x.41	4,1x10,4												

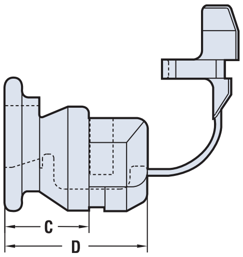
Standard color black. Consult ESTCO for white and other colors.

[1] Maximum Panel Thickness–Part has additional clearance.

For Round Cables

WILL FIT THESE CABLES				PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS			
UL Type Designation	AWG/ Conductors	Approx. Diameter		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness		Black		C ESTENSION LENGTH		D BODY LENGTH	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
SV & SVT	18/2	.250	6,3	.500	12,7	.450	11,4	.062	1,6	**H-1143**	SR 5N-5	.406	10,3	.688	17,5
	18/3	.255	6,5	.500-.515	12,7-13,1										
HPD	18/2	.270	6,9	.500	12,7										
	16/2	.290	7,4	.500-.515	12,7-13,1										
SJ, SJO & SJT	18/2	.300	7,6	.625	15,9	.550	14,0	.125	3,2	**H-1226**	SR 6P-5	.421	10,7	.813	20,7
	16/2	.315	8,0	.625	15,9	.550	14,0	.125	3,2	**H-1232**	SR 6P2-5				
	18/3	.320	8,1												
SJ, SJO & SJT	16/2	.325	8,2	.625	15,9	.550	14,0	.062	1,6	**H-1223**	SR 6N3-5	.421	10,7	.813	20,7
	18/3	.330	8,4												
	14/2	.350	8,9												
	16/3	.355	9,0												
	18/4	.360	9,1												
Same as SR 6N3-5 above except →								.125	3,2	**H-1220**	SR 6P3-5	.421	10,7	.813	20,7





Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

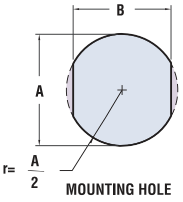
ISO 9001:2000 Certified
CERTIFICATE # 08-511

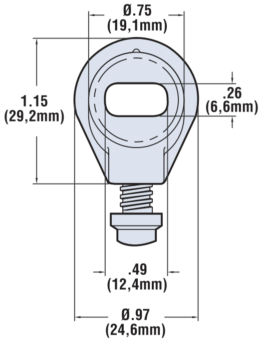
Heyco® Euro Strain Relief Bushings

USR Series–US Patent No. 5,052,643 Foreign Patents

WILL FIT THESE CABLES			PANEL DIMENSIONS						PART NO. Black	DESCRIPTION
Cross Section	Approx. Size		A Mounting Hole Dia.		B To Prevent Rotation		Maximum Panel Thickness			
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
Round or Flat	up to .400	up to 10,2	.875	22,2	.770	19,6	.125	3,2	**H-1724**	USR-400
Flat	up to .250 x .400	6,4 x 10,2	.875	22,2	.770	19,6	.125	3,2	**H-1726**	USR-401
Round or Flat (SPT Type)	up to .400	up to 10,2	.875	22,2	.770	19,6	.125	3,2	***H-1730**	USR-40

Standard color black. Consult ESTCO for white and other colors.





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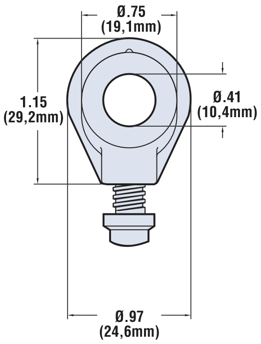

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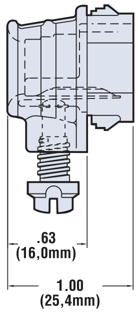


For European Requirements

Designed to meet those requirements wherein the Strain Relief device must remain attached to the panel during cable removal or replacement.

- Captive screw cannot be removed from body during cable removal or replacement. (The screw forces the locking flap against the cable.)
- Reinforcing ribs provide extra strength.
- Nylon USR-400 series parts may help you comply with IEC Publication #335, CEE #10 and #11; VDE #0720, #0730, and others.
- Protects your cable against forces of pull, push, twist, and flex; prevents use of larger-than-intended cord diameter.
- Easy panel installation:fingertip pressure locks bushing into .875″ (22,2 mm) holes with panel thickness up to .125″ (3,2 mm).
- No need for separate cord guard. The bushing cord exit features a bell-mouth contour, with radius 1-1/2 times the exit hole diameter.
- USR-40 uses captive metal screw and USR-400/401 uses captive acetyl screw.

Material	6/6 Nylon
Certifications	ꭱU Recognized File E15331 for round, flat (SPT Type Cables) Ⓤ Listed under Underwriters' Laboratories File E103540 Ⓢ Certified by the Canadian Standards association File LR81067
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Euro Strain Relief Bushings

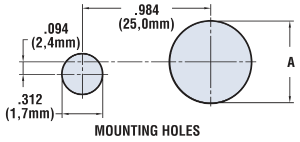
CEE Series

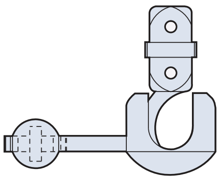
For European Requirements
Designed to meet those requirements wherein the Strain Relief device must remain attached to the panel during cable removal or replacement.

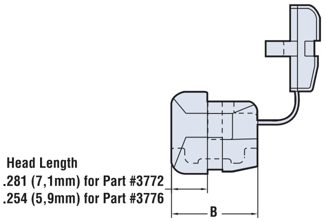
- Button lock, flexibly connected to the bushing, mounts into a hole alongside the bushing.
- Button lock secures the bushing to the panel during cable removal or replacement.

WILL FIT THESE CABLES			PANEL DIMENSIONS				PART NO.	DESCRIPTION	D BODY LENGTH	
Cross Section	Approx. Diameter		A Mounting Hole Dia.		Maximum Panel Thickness		Black			
	in.	mm.	in.	mm.	in.	mm.			in.	mm.
Round	.300	7,6	.625	15,9	.125	3,2	**H-3772**	SR 6P10 CEE	.671	17,0
Round	.325- .360	8,3- 9,1	.625	15,9	.125	3,2	**H-3776**	SR 6P30 CEE	.625	15,9

Standard color black. Consult ESTCO for white and other colors.







Heyco® T-Bar

- **Part No. 3791**, T-bar available in **black only.**
- During cable removal or replacement, the T-Bar prevents complete removal of the strain relief bushing from the panel, reducing the risk of losing the bushing.
- For use in mounting holes .625″ (16,0 mm) and smaller.
- Snap T-Bar onto the strain relief bushing strap (linking body to key piece), then feed it into the panel mounting hole.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

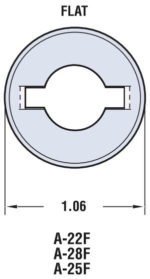
Quick Specs

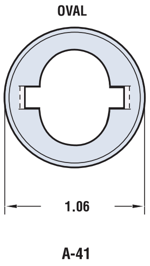
Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

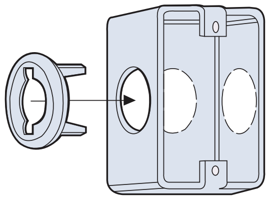
Heyco® Knock-Out Adapters For Strain Relief Bushings

Will Adapt These Strain Reliefs to Fit an .875” (22,2mm.) Diameter Hole.	PART NO.	DESCRIPTION	LUG LENGTH	
			in.	mm.
4K-1, 4K-4, 4K-6, 4L-1 4L-4, 5L-1, 5P3-4, 5P-4, 5P-7, 5S-1, 6W-1, 14-1, 15-1, 5M-3	**H-7562**	A-22F	.500	12,7
6K-5, 6L-1, 6P2-5, 6P3-4 6P3-5, 6P3-7, 6P-4, 6P-5	**H-7567**	A-25F	.500	12,7
6P-7, 10-2, 11-2, 11K-2 2P-4, 2P-5, 5K-4, 5W-1 16-1, 2L-1, 2M-4	**H-7570**	A-28F	.500	12,7
20-1, 20L-1, 30-1	**H-7572**	A-41	.500	12,7

- Made of zinc-plated steel.
- Converts trade size knock-out holes to diameters suitable for strain relief bushings.
- Allows for standardization of panel design since various strain relief bushing sizes can be adapted to one panel hole size.
- Allows for the mounting of strain relief bushings into unusually thick panel.
- Adapters mount into 1/2″ knock-outs (7/8″ or 22,2 mm nominal diameter).







Heyco® Back-Up Washer For Strain Relief Bushings

- Made of zinc-plated steel.
- Used together with our Strain Relief Bushings.
- For situations where the panel is too flexible to support UL's 35# strain relief pull-out test.
- OR for situations where the panel is thin relative to the strain relief's locking slot. The backup washer eliminates "play".
- OR can be used to contain the strain relief bushing in U-slot openings.

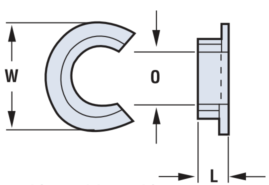
PART NO.	DESCRIPTION	INSIDE DIAMETER		OUTSIDE DIAMETER		THICKNESS	
		in.	mm.	in.	mm.	in.	mm.
H-7592	SRW 500	.500	12,7	.625	15,9	.025	0,6

Heyco® Metal Strain Relief Bushings

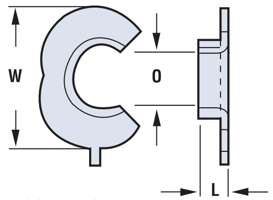
For Round Cables

- Made of plated steel.
- Absorbs pull force only, to help meet UL and CSA requirements.
- Designed to be attached to wire and cable inside of the panel.
- Permanent grip, nonslip design.
- Easy assembly with recommended hand pliers.

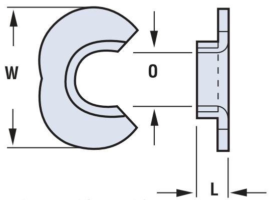
WILL FIT THESE CABLES			DESCRIPTION	PART DIMENSIONS						PART NO. Black	ATTACHING PLIERS NO.
UL Type Description	Approximate Diameter			O		W		L			
	in.	mm.		in.	mm.	in.	mm.	in.	mm.		
HPD	.312	7,9	MSR-1	.296	7,5	.593	15,1	.171	4,4	**H-7410**	0019
SJ	.300-.343	7,6-8,7	MSR-1A	.203	5,2	.531	13,5	.171	4,4	**H-7411**	0018
SV	.250	6,4	MSR-1B	.296	7,5	.500	12,7	.171	4,4	**H-7412**	0018
SJ	.380	9,6	MSR-2W	.265	6,7	.781	19,8	.171	4,4	**H-7414**	0018
HPD	.312	7,9	MSR-2S	.295	7,5	.781	19,8	.171	4,4	**H-7418**	0019
SJ	.300-.343	7,6-8,7	MSR-2A	.203	5,2	.781	19,8	.171	4,4	**H-7419**	0018
HPD	.312	7,9	MSR-2	.296	7,5	.765	19,5	.171	4,4	**H-7420**	0019
HPD	.312	7,9	MSR-3	.296	7,5	.656	16,7	.171	4,4	**H-7430**	0019



7410, 7411, 7412



7420, 7430



7414, 7418, 7419

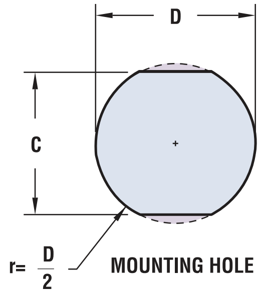
Heyco® Strain Relief Mounting Hole Plugs

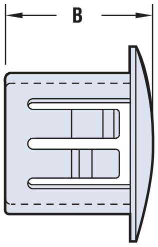
Standardize Panel Design and Fill Unused Holes

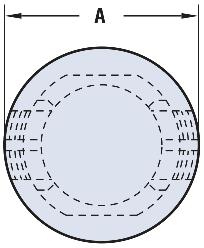
PANEL DIMENSIONS						PART NO. Black	DESCRIPTION	PANEL DIMENSIONS			
Maximum Thickness		D Long Axis		C Short Axis				A Head Diameter		B Overall Height	
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
.125	3,2	.437	11,1	.390	9,9	**H-2488**	DD-437-390	.531	13,5	.406	10,3
.125	3,2	.500	12,7	.445	11,3	**H-2491**	DD-500-445	.578	14,7	.406	10,3
.125	3,2	.562	14,3	.530	13,5	**H-2494**	DD-562-530	.656	16,7	.406	10,3
.125	3,2	.625	15,9	.550	14,0	**H-2497**	DD-625-550	.728	18,5	.406	10,3
.125	3,2	.750	19,0	.625	15,9	**H-2503**	DD-750-625	.921	23,4	.406	10,3
.125	3,2	.875	22,2	.770	19,6	**H-2509**	DD-875-770	1.016	25,8	.453	11,5
.157	4,0	.690	17,5	.690	17,5	**H-1892**	RP-175-175	.830	21,1	.467	11,9
.099	2,5	.512	13,0	.453	11,5	**H-1890**	RP-115-130*	.580	14,7	.403	10,2

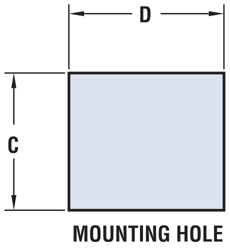
Standard color black. Consult ESTCO for white and other colors.
*Rectangular plug to fill unneeded Lockit Strain Relief Mounting holes/not UL or CSA.
Locking finger steps designed in fractional increments.

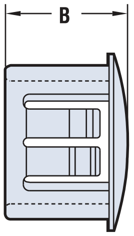
- Closes unused strain relief mounting holes or Double “D” holes punched or molded with two opposing flats.
- Convex, matte finish head tapers to a thin edge.
- Locks firmly in panels up to .125″ (3,2 mm) thick.
- Quick and easy installation.
- Use our rectangular plugs #1890 and #1892 to fill unneeded square Lockit™ Strain Relief mounting holes.

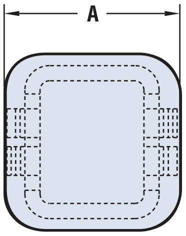












1890

Material	6/6 Nylon
Certifications	Recognized File E15331 for round, flat (SPT Type Cables) File E15331 Certified by the Canadian Standards association File LR8919
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

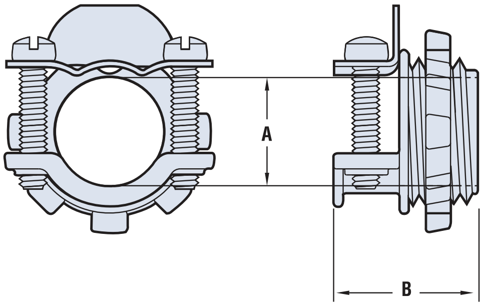
Heyco® Zinc Die-Cast Box Connectors

Clamp-Type Connector

- **Part No. 3043** (751) commonly known as a “Romex Connector”.
- For single or multiple flexible cord applications, first determine cord diameter, then refer to the “A” columns in the tabular chart.
- Ⓤ Listed under Underwriters’ Laboratories File E103540.
- Ⓒ Certified by Canadian Standards Association File LR18130.

TRADE SIZE	NOMINAL MOUNTING HOLE DIAMETER		WILL FIT THESE CABLES*			PART NO.	DESCRIPTION	PART DIMENSIONS					
			Flexible Metallic Conduit	Armored **	Non-Metallic Sheathed			A MINIMUM WIRE		A MAXIMUM WIRE		B OVERALL LENGTH	
	in.	mm.						in.	mm.	in.	mm.	in.	mm.
MSR-1 MSR-1A MSR-1B MSR-2W	.875	22,2	–	14/2, 14/3, 12/2 12/3, 10/2, 10/3	14/2, 14/3, 12/2 12/3, 10/2, 10/3	**H-3043**	751	.18	4,6	.64	16,3	.81	20,6

*Gauge/Conductors, except FMC.
**1/2″ K.O.



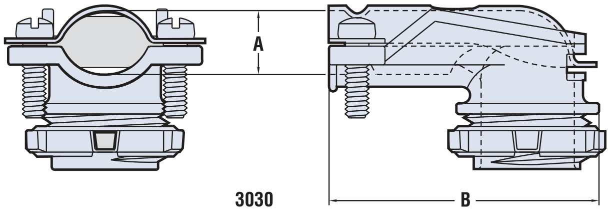
90° Angle Connectors

Part No. 3030 (561), and 3031 (563) are also UL Listed for flexible cords.

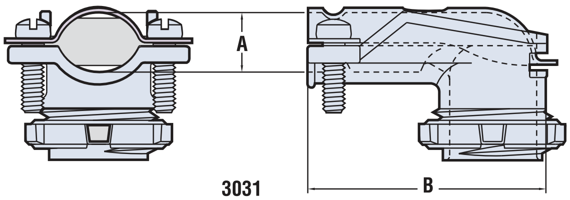
- To specify the correct fitting for a flexible cord, first determine cord diameter, then refer to the “A” columns in the tabular chart.

TRADE SIZE	NOMINAL MOUNTING HOLE DIAMETER		WILL FIT THESE CABLES*			PART NO.	DESCRIPTION	PART DIMENSIONS					
			Flexible Metallic Conduit	Armored **	Non-Metallic Sheathed			A MINIMUM WIRE		A MAXIMUM WIRE		B OVERALL LENGTH	
	in.	mm.						in.	mm.	in.	mm.	in.	mm.
3/8**	.875	22,2	–	14/2, 14/3, 14/4 12/2, 12/3, 12/4 10/2, 8/1 6/1, 4/1	–	**H-3030**	561	.40	10,2	.63	16,0	1.81	46,0
1/2	.875	22,2	–	8/2	–	**H-3031**	563	.65	16,5	.97	24,6	2.18	55,4

*Gauge/Conductors, except FMC.
**1/2″ K.O.



3030



3031

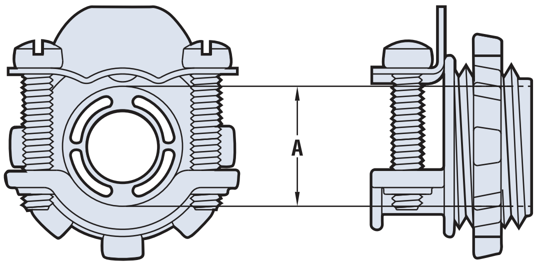
Heyco® Zinc Die-Cast Box Connectors

Combination Connector

TRADE SIZE	NOMINAL MOUNTING HOLE DIAMETER		WILL FIT THESE CABLES*			PART NO.	DESCRIPTION	PART DIMENSIONS					
			Flexible Metallic Conduit	Armored **	Non-Metallic Sheathed			A MINIMUM WIRE		A MAXIMUM WIRE		B OVERALL LENGTH	
	in.	mm.						in.	mm.	in.	mm.	in.	mm.
3/8 **	.875	22,2	3/8	14/2, 14/3, 12/2 12/3, 10/2, 10/3	14/2, 14/3, 12/2, 12/3	**H-3029**	551	.18	4,6	.63	16,0	.92	23,4

*Gauge/Conductors, except FMC.
**1/2″ K.O.

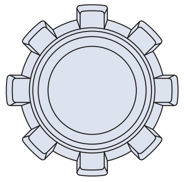
- Also fits corrugated MC at .510″ (13,0 mm) diameter, smooth MC at .345″ (8,8 mm) to .525″ (13,3 mm) diameter.
- UL Listed under Underwriters' Laboratories File 103540.
- SP Certified by Canadian Standards Association File LR18130.

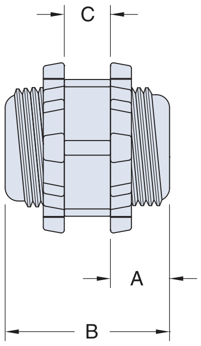


Box Spacer

TRADE SIZE	NOMINAL MOUNTING HOLE DIAMETER		PART NO.	DESCRIPTION	PART DIMENSIONS					
					A		B		C	
	in.	mm.			in.	mm.	in.	mm.	in.	mm.
1/2	.875	22,2	**H-9840**	SP1	.60	15,2	1.12	28,4	.28	7,1

- Provides a connecting link between boxes, panels or chassis.
- Space boxes 5/16″ (7,9 mm) apart.
- Die-cast locknut included.
  UL Certified by Canadian Standards Association File LR72095.





ISO 9001:2000 Certified
CERTIFICATE # 08-511

Notes:

BUSHINGS AND PLUGS

Snap Bushings and Metric
4-1, 4-2, 4-3

Thick Panel Snap Bushing
4-4

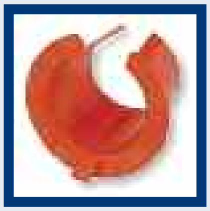
Snub Bushings & Shorty Bushings
4-5, 4-6

Universal Bushings & Shorty Universal Bushings
4-7

Thick Panel Universal Bushings
4-8

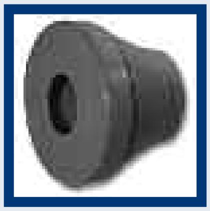
Open/Closed Universal Bushings
4-9

Open/Closed Bushings
4-10


Armor Bushings
4-11

Threaded & Double Insulated Bushings
4-12

Rubber Grommets
4-13, 4-14, 4-15, 4-16


Snap-In PG & Metric Liquid Tight Bushings
4-17

Rubber Push-In Bumpers
4-18

Polyurethane Adhesive Backed Bumpers Hemispherical
4-19

Polyurethane Adhesive Backed Bumpers Cylindical
4-20

Feets of Strength FSD-Feet w/ Drive Pin
4-21

Feets of Strength FSS-Feet w/ Slotted Screw Rivet
4-21

Feets of Strength FSR-Feet w/ Push Rivet
4-22

ESTCO
Bushings and Plugs

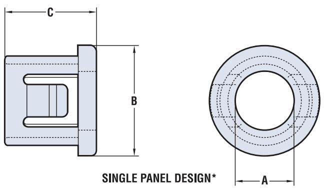
Heyco® Snap Bushings

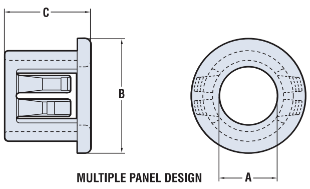
Mounting Diameter: 0.250″ to 0.750″

- Converts raw-edged holes to smooth, neat, insulated holes.
- Locking fingers snap into holes with fingertip pressure.
- Withstands a push back force of 35 pounds.
- Insulates and mechanically protects electrical and telecommunications cables, tubing, hose, rope, and utility lines.
- Available in multiple sizes for use in .250″ (6,4 mm) to 6.00″ (152,4 mm) diameter holes.
- We offer the following brasscolored parts for lamp and lighting applications (Please consult ESTCO for lead times):
  Part No. 2012, SB 312-3 Brass
  Part No. 2033, SB 375-4 Brass
  Part No. 2041, SB 437-4 Brass

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black	White		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.
.040	1,0	.250	6,4	**H-2003***	**H-2004***	SB 250-040	.125	3,2	.312	7,9	.312	7,9
.062	1,6	.250	6,4	**H-2000***	**H-2001***	SB 250-2	.125	3,2	.312	7,9	.312	7,9
.062	1,6	.312	7,9	**H-2010***	**H-2011***	SB 312-3	.187	4,8	.375	9,5	.312	7,9
.125	3,2	.375	9,5	**H-2020**	**H-2021**	SB 375-3	.187	4,8	.468	11,9	.406	10,3
.125	3,2	.375	9,5	**H-2030**	**H-2031**	SB 375-4	.250	6,4	.468	11,9	.406	10,3
.172	4,4	.375	9,5	**H-2017***	**H-2018***	SB 375-281	.281	7,1	.468	11,9	.406	10,3
.125	3,2	.437	11,1	**H-2038**	**H-2039**	SB 437-4	.270	6,8	.531	13,5	.406	10,3
.125	3,2	.437	11,1	**H-2043**	**H-2044**	SB 437-5	.312	7,9	.531	13,5	.406	10,3
.125	3,2	.437	11,1	**H-2042**	**H-2037**	SB 437-243	.243	6,2	.531	13,5	.406	10,3
.125	3,2	.500	12,7	**H-2058**	**H-2059**	SB 500-4	.250	6,4	.570	14,5	.406	10,3
.125	3,2	.500	12,7	**H-2049**	**H-2050**	SB 500-5	.312	7,9	.570	14,5	.406	10,3
.125	3,2	.500	12,7	**H-2053**	**H-2054**	SB 500-6	.391	9,9	.570	14,5	.406	10,3
.125	3,2	.562	14,3	**H-2060**	**H-2061**	SB 562-5	.312	7,9	.656	16,7	.406	10,3
.125	3,2	.562	14,3	**H-2063**	**H-2064**	SB 562-6	.391	9,9	.656	16,7	.406	10,3
.125	3,2	.562	14,3	**H-2066**	**H-2067**	SB 562-7	.437	11,1	.656	16,7	.406	10,3
.125	3,2	.625	15,9	**H-2075**	**H-2078**	SB 625-4	.250	6,4	.718	18,2	.406	10,3
.125	3,2	.625	15,9	**H-2070**	**H-2071**	SB 625-7	.437	11,1	.718	18,2	.406	10,3
.125	3,2	.625	15,9	**H-2073**	**H-2074**	SB 625-8	.500	12,7	.718	18,2	.406	10,3
.250	7,1	.625	15,9	**H-2830***	**H-2831***	SB 625-500	.500	12,7	.703	17,9	.531	13,5
.125	3,2	.687	17,4	**H-2083**	**H-2084**	SB 687-8	.500	12,7	.781	19,8	.406	10,3
.125	3,2	.687	17,4	**H-2086**	**H-2087**	SB 687-9	.562	14,3	.781	19,8	.406	10,3
.125	3,2	.750	19,1	**H-2090**	**H-2091**	SB 750-6	.391	9,9	.850	21,6	.406	10,3
.125	3,2	.750	19,1	**H-2092**	**H-2099**	SB 750-8	.500	12,7	.850	21,6	.406	10,3
.125	3,2	.750	19,1	**H-2093**	**H-2094**	SB 750-9	.562	14,3	.850	21,6	.406	10,3
.125	3,2	.750	19,1	**H-2096**	**H-2097**	SB 750-10	.609	15,5	.850	21,6	.406	10,3
.250	6,4	.750	19,1	**H-2840***	**H-2841***	SB 750-625	.625	15,9	.828	21,0	.531	13,5

Standard color black. Consult ESTCO for white and other colors.
*Depicts single panel design.
Locking fingers in fractional increment up to the maximum panel thickness.





Quick Specs

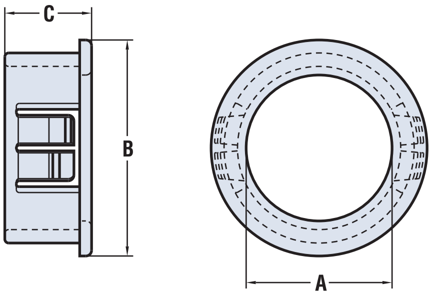
Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Snap Bushings

Mounting Diameter: 0.812″ to 6.000″

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black	White		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.
.125	3,2	.812	20,6	**H-2100**	**H-2101**	SB 812-9	.562	14,3	.890	22,6	.406	10,3
.125	3,2	.812	20,6	**H-2103**	**H-2104**	SB 812-10	.625	15,9	.890	22,6	.406	10,3
.125	3,2	.875	22,2	**H-2110**	**H-2111**	SB 875-6	.375	9,5	.953	24,2	.453	11,5
.125	3,2	.875	22,2	**H-2113**	**H-2114**	SB 875-7	.437	11,1	.953	24,2	.453	11,5
.125	3,2	.875	22,2	**H-2116**	**H-2117**	SB 875-8	.500	12,7	.953	24,2	.453	11,5
.125	3,2	.875	22,2	**H-2120**	**H-2121**	SB 875-9	.562	14,3	.953	24,2	.453	11,5
.125	3,2	.875	22,2	**H-2123**	**H-2124**	SB 875-10	.625	15,9	.953	24,2	.453	11,5
.125	3,2	.875	22,2	**H-2126**	**H-2127**	SB 875-11	.687	17,5	.953	24,2	.453	11,5
.125	3,2	1.000	25,4	**H-2140**	**H-2141**	SB 1000-12	.766	19,4	1.125	28,6	.453	11,5
.125	3,2	1.093-1.125	27,8-28,6	**H-2160**	**H-2161**	SB 1093-13	.812	20,6	1.218	30,9	.453	11,5
.125	3,2	1.093-1.125	27,8-28,6	**H-2163**	**H-2164**	SB 1093-14	.875	22,2	1.218	30,9	.453	11,5
.125	3,2	1.093-1.125	27,8-28,6	**H-2166**	**H-2167**	SB 1093-15	.937	23,8	1.218	30,9	.453	11,5
.125	3,2	1.187	30,2	**H-2182**	**H-2183**	SB 1187-15	.937	23,8	1.312	33,3	.453	11,5
.125	3,2	1.250	31,8	**H-2198**	**H-2199**	SB 1250-15	.937	23,8	1.359	34,5	.453	11,5
.125	3,2	1.250	31,8	**H-2201**	**H-2202**	SB 1250-16	1.000	25,4	1.310	33,2	.453	11,5
.125	3,2	1.375	34,9	**H-2207**	**H-2208**	SB 1375-14	.875	22,2	1.490	37,3	.453	11,5
.125	3,2	1.375	34,9	**H-2210**	**H-2211**	SB 1375-16	1.014	25,8	1.490	37,3	.453	11,5
.125	3,2	1.500	38,1	**H-2233**	**H-2234**	SB 1500-17	1.062	27,0	1.609	40,9	.453	11,5
.125	3,2	1.500	38,1	**H-2236**	**H-2237**	SB 1500-18	1.125	28,6	1.609	40,9	.453	11,5
.125	3,2	1.500	38,1	**H-2240**	**H-2241**	SB 1500-21	1.312	33,3	1.609	40,9	.453	11,5
.125	3,2	1.750	44,5	**H-2300**	**H-2301**	SB 1750-22	1.375	34,9	1.875	47,6	.453	11,5
.125	3,2	2.000	50,8	**H-2400**	**H-2401**	SB 2000-26	1.640	41,6	2.125	54,0	.453	11,5
.125	3,2	2.000	50,8	**H-2406**	—	SB 2000-28	1.750	44,5	2.125	54,0	.453	11,5
.250	6,4	2.093	53,1	**H-2415**	**H-2416**	SB 2.093-29	1.813	46,0	2.350	59,7	.720	18,3
.250	6,4	2.250	57,2	**H-2417**	**H-2418**	SB 2.250-29	1.860	47,1	2.480	63,1	.720	18,3
.250	6,4	2.500	63,5	**H-2420**	**H-2421**	SB 2.500-31	1.970	50,0	2.660	67,5	.720	18,3
.250	6,4	3.000	76,2	**H-2461**	**H-2462**	SB 3.000-39	2.470	62,7	3.160	80,2	.720	18,3
.250	6,4	3.375	85,7	**H-2407**	**H-2408**	SB 3.375-45	2.812	71,4	3.660	92,9	.720	18,3
.250	6,4	3.500	88,9	**H-2470**	**H-2471**	SB 3.500-47	2.940	74,7	3.660	93,0	.720	18,3
.250	6,4	4.000	101,6	**H-2479**	**H-2480**	SB 4.000-55	3.470	88,1	4.150	105,4	.720	18,3
.250	6,4	5.000	127,0	**H-2409**	**H-2410**	SB 5.000-70	4.375	113,8	5.219	132,6	.740	18,8
.250	6,4	6.000	152,4	**H-2484**	**H-2485**	SB 6.000-86	5.375	139,2	6.219	157,9	.740	18,8



Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increment up to the maximum panel thickness.

Material	6/6 Nylon
Certifications	ᴿᵁ Recognized under the Component Program of Underwriters' File E15331 Ⓢ Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick Specs

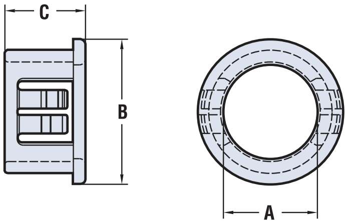
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Metric Snap Bushings

- Converts raw-edged holes to smooth ones.
- Locking fingers snap into holes with fingertip pressure.
- Withstands a push back force of 35 pounds.
- Multiple sizes for use in .630″ (16,0 mm) to 1.260″ (32,0 mm) diameter holes. For other metric sizes, consult Heyco.
- Locks firmly into panel up to .098″ (2,5 mm) thick.
- Same design as Heyco Snap Bushings but designed for metric sized mounting holes.

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.098	2,5	.630	16,0	**H-2142**	MSB 16-12	.472	12,0	.728	18,5	.406	10,3
.098	2,5	.787	20,0	**H-2144**	MSB 20-16	.630	16,0	.890	22,6	.406	10,3
.098	2,5	.984	25,0	**H-2146**	MSB 25-19	.748	19,0	1.094	27,8	.453	11,5
.098	2,5	1.260	32,0	**H-2148**	MSB 32-26	1.023	26,0	1.375	34,9	.453	11,5

Standard color black. Consult ESTCO for white and other colors..



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

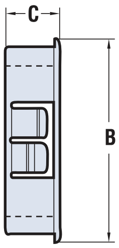
Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

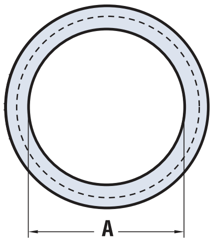
Heyco® Thick Panel Snap Bushings

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.250	6,4	.500	12,7	**H-3126**	SBT-500-6	.391	9,9	.578	14,7	.562	14,3
.250	6,4	.875	22,2	**H-3104**	SBT-875-11	.687	17,5	.953	24,2	.562	14,3
.250	6,4	1.000	25,4	**H-3108**	SBT-1000-12	.766	19,4	1.125	28,6	.562	14,3
.250	6,4	1.093- 1.125	27,8- 28,6	**H-3128**	SBT-1093-15	.937	23,8	1.218	30,9	.562	14,3
.250	6,4	1.187	30,2	**H-3130**	SBT-1187-15	.937	23,8	1.312	33,3	.562	14,3
.250	6,4	1.250	31,8	**H-3132**	SBT-1250-16	1.000	25,4	1.310	33,2	.562	14,3
.250	6,4	1.375	34,9	**H-3110**	SBT-1375-16	1.000	25,4	1.500	38,1	.562	14,3
.250	6,4	1.500	38,1	**H-3112**	SBT-1500-21	1.312	33,3	1.620	41,2	.562	14,3
.250	6,4	1.750	44,5	**H-3114**	SBT-1750-22	1.375	34,9	1.875	47,6	.562	14,3
.250	6,4	2.000	50,8	**H-3116**	SBT-2000-26	1.625	41,3	2.125	54,0	.562	14,3

Standard color black. Consult ESTCO for white and other colors..

- For use in mounting panels up to 1/4˝ thick
- Converts raw-edged holes to smooth, neat, insulated holes.
- Locking fingers snap into holes with fingertip pressure.
- Withstands a push back force of greater than 35 pounds.
- Insulates and mechanically protects electrical and telecommunications cables, tubing, hose, rope, and utility lines.
- Available in multiple sizes for use in .500˝ (12,7 mm) to 2.000˝ (50,8 mm) diameter holes.





Material	**6/6 Nylon**
Certifications	**Ⓤ Recognized under the Component Program of Underwriters' File E15331** **Ⓢ Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

Quick Specs

IMSG

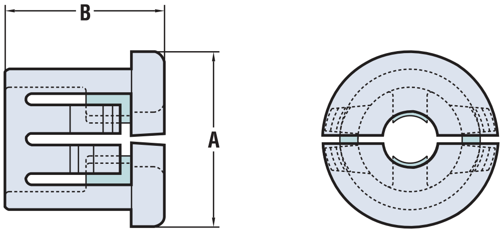
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Snub Bushings

- Provides insulation plus light strain relief.
- Suitable for 1/8″ (3,2 mm) to 1/4″ (6,4 mm) diameter cable, tubing or hose.
- The ID opens to accept the cable then closes firmly when installed into the mounting hole.

PANEL DIMENSIONS				APPROX. CABLE DIA. ACCOMMODATED		PART NO.	DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter				Black		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.
.125	3,2	.375	9,5	1/8	3,2	**H-2034**	K 375-125	.46	11,7	.42	10,7
.125	3,2	.437	11,1	3/16	4,8	**H-2047**	K 437-187	.47	11,9	.44	11,2
.125	3,2	.500	12,7	1/4	6,4	**H-2057**	K 500-250	.56	14,2	.44	11,2

Standard color black. Consult ESTCO for white and other colors..



Quick Specs

Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

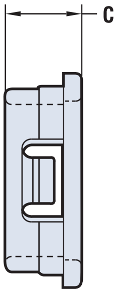
ISO 9001:2000 Certified
CERTIFICATE # 08-511

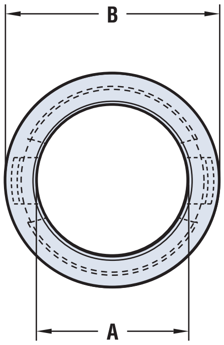
Heyco® Shorty Bushings

PANEL DIMENSIONS Maximum Thickness in.	PANEL DIMENSIONS Maximum Thickness mm.	Mounting Hole Diameter in.	Mounting Hole Diameter mm.	PART NO. Black	PART NO. White	DESCRIPTION	PART DIMENSIONS A Inside Diameter in.	A Inside Diameter mm.	B Head Diameter in.	B Head Diameter mm.	C Overall Height in.	C Overall Height mm.
.062	1,6	.187	4,7	**H-2800**	**H-2801**	B 187-125	.125	3,2	.250	6,4	.237	6,0
.062	1,6	.218	5,5	**H-2859**	**H-2860**	B 218-125	.125	3,2	.281	7,1	.237	6,0
.062	1,6	.281	7,1	**H-2853**	**H-2854**	B 281-218	.218	5,5	.343	8,7	.237	6,0
.062	1,6	.312	7,9	**H-2810**	**H-2811**	B 312-250	.250	6,3	.375	9,5	.237	6,0
.062	1,6	.343	8,7	**H-2856**	**H-2857**	B 343-218	.218	5,5	.406	10,3	.250	6,4
.062	1,6	.375	9,5	**H-2803**	**H-2804**	B 375-250	.250	6,3	.437	11,1	.250	6,4
.062	1,6	.406	10,3	**H-2806**	**H-2807**	B 406-281	.281	7,1	.468	11,9	.250	6,4
.062	1,6	.437	11,1	**H-2813**	**H-2814**	B 437-312	.312	7,9	.500	12,7	.250	6,4
.062	1,6	.468	11,9	**H-2817**	**H-2818**	B 468-343	.343	8,6	.53	13,5	.250	6,4
.062	1,6	.500	12,7	**H-2820**	**H-2821**	B 500-375	.375	9,5	.562	14,3	.250	6,4
.062	1,6	.531	13,5	**H-2824**	**H-2825**	B 531-406	.406	10,3	.593	15,1	.250	6,4
.062	1,6	.593	15,1	**H-2833**	**H-2834**	B 593-468	.468	11,9	.656	16,7	.250	6,4
.062	1,6	.625	15,9	**H-2827**	**H-2828**	B 625-500	.500	12,7	.703	17,9	.250	6,4
.062	1,6	.750	19,1	**H-2836**	**H-2837**	B 750-625	.625	15,9	.828	21,0	.250	6,4
.062	1,6	.781	19,8	**H-2844**	**H-2845**	B 781-625	.625	15,9	.859	21,8	.250	6,4
.062	1,6	.875	22,2	**H-2850**	**H-2851**	B 875-750	.750	19,0	.945	24,0	.250	6,4
.062	1,6	1.000	25,4	**H-2847**	**H-2848**	B 1000-875	.879	22,3	1.06	27,0	.250	6,4
.062	1,6	1.093	27,8	**H-2838**	**H-2839**	B 1093-969	.969	24,6	1.156	29,4	.255	6,5

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increment up to the maximum panel thickness.

- Available in multiple sizes for use in mounting holes from .187″ (4,7 mm) to 1.093″ (27,8 mm).
- Insulating feed-thru bushings for limited internal clearance (minimum .125″ or 3,2 mm) applications.
- Insulates and isolates electric or telecommunications cables as well as low RPM shafts and pushpull rods.
- Locking fingers hold securely after only fingertip pressure snap-in installation.





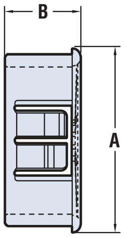
Material	**6/6 Nylon**
Certifications	**ᴿᵁ Recognized under the Component Program of Underwriters' File E15331** **Ⓢ Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

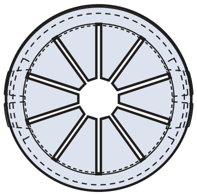
Quick Specs

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Universal Bushings

- Flexible shutters adjust to accommodate and support any shape from .125″ (3,2 mm) to a maximum diameter of 1.500″ (38,1 mm).
- Absorbs vibration and cushions and insulates cables, tubing, hoses or shafts with limited internal clearance.
- Fingertip pressure snap-locks the bushing into its mounting hole.





PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		Maximum Inside Diameter		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.125	3,2	.500	12,7	**H-2055**	UB-500	.312	7,6	.600	15,2	.385	9,8
.125	3,2	.625	15,9	**H-2077**	UB-625	.437	11,1	.718	18,3	.406	10,3
.125	3,2	.750	19,1	**H-2089**	UB-750	.500	12,7	.844	21,4	.390	9,9
.125	3,2	.812	20,6	**H-2106**	UB-812	.500	12,7	.890	22,6	.390	9,9
.125	3,2	.875	22,2	**H-2119**	UB-875	.562	14,3	.937	23,8	.453	11,5
.125	3,2	1.000	25,4	**H-2137**	UB-1000	.750	19,1	1.063	27,0	.453	11,5
.125	3,2	1.093	27,8	**H-2157**	UB-1093	.812	20,6	1.156	29,4	.453	11,5
.125	3,2	1.187	30,2	**H-2153**	UB-1187	.950	24,1	1.250	31,8	.453	11,5
.125	3,2	1.250	31,8	**H-2155**	UB-1250	1.015	25,8	1.314	33,4	.453	11,5
.125	3,2	1.375	34,9	**H-2184**	UB-1375	1.000	25,4	1.490	37,8	.453	11,5
.125	3,2	1.500	38,1	**H-2213**	UB-1500	1.062	26,9	1.610	40,9	.450	11,4
.125	3,2	1.750	44,5	**H-2298**	UB-1750	1.375	34,9	1.870	47,5	.465	11,8
.125	3,2	2.000	50,8	**H-2422**	UB-2000	1.640	41,6	2.130	54,0	.490	12,4
.250	6,35	2.500	63,5	**H-2440**	UB-2.500	1.970	50,0	2.660	67,6	.750	19,05
.250	6,35	3.000	76,2	**H-2460**	UB-3.000	2.470	62,7	3.160	80,3	.750	19,05

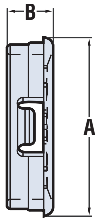
Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to maximum panel thickness.

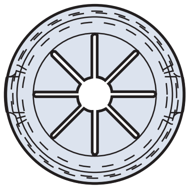
Heyco® Shorty Universal Bushings

- Absorbs vibration and cushions and insulates cables, tubing, hoses or shafts with limited internal clearance.
- Fingertip pressure snap-locks the bushing into its mounting hole.
- Flexible shutters adjust to accommodate and support any shape from .125″ (3,2 mm) to a maximum diameter of .820″ (27,8 mm).
- See Quick Specs on 4-8.

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		Maximum Inside Diameter		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.062	1,6	.500	12,7	**H-2858**	SUB 500	.312	7,6	.600	15,2	.250	6,4
.062	1,6	.625	15,9	**H-2861**	SUB 625	.437	11,1	.729	18,5	.250	6,4
.062	1,6	.750	19,1	**H-2862**	SUB 750	.500	12,7	.859	21,8	.250	6,4
.062	1,6	.875	22,2	**H-2863**	SUB 875	.560	14,2	.937	23,8	.250	6,4
.062	1,6	1.000	25,4	**H-2864**	SUB 1000	.750	19,0	1.063	27,0	.250	6,4
.062	1,6	1.093	27,8	**H-2158**	SUB 1093	.820	27,8	1.156	29,4	.250	6,4

Standard color black. Consult ESTCO for white and other colors.





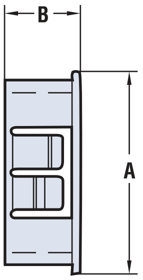
ISO 9001:2000 Certified
CERTIFICATE # 08-511

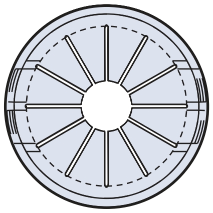
Heyco® Thick Panel Universal Bushings

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		Maximum Inside Diameter		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.250	6,4	.500	12,7	**H-3001**	UBT-500	.312	7,6	.600	15,2	.545	13,8
.250	6,4	.625	15,9	**H-3118***	UBT-625	.437	11,1	.718	18,3	.550	14,0
.250	6,4	.750	19,0	**H-3119***	UBT-750	.500	12,7	.844	21,4	.550	14,0
.250	6,4	.875	22,2	**H-3120**	UBT-875	.562	14,3	.937	23,8	.550	14,0
.250	6,4	1.000	25,4	**H-3121**	UBT-1000	.750	19,0	1.063	27,0	.550	14,0
.250	6,4	1.093	27,8	**H-3002**	UBT-1093	.812	20,6	1.156	29,4	.550	14,0
.250	6,4	1.375	34,9	**H-3003**	UBT-1375	1.000	25,4	1.490	37,8	.562	14,3
.250	6,4	1.500	38,1	**H-3122**	UBT-1500	1.062	26,9	1.610	40,9	.562	14,3

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to maximum panel thickness.
*Depicts single panel design.

- For use in mounting panels up to .25″ thick.
- Converts raw-edged holes to smooth, neat, insulated holes.
- Flexible shutters to absorb vibration on the inside diameter.
- Locking fingers snap into holes with fingertip pressure.
- Withstands a push back force of 35 pounds.
- Insulates and mechanically protects electrical and telecommunications cables, tubing, hose, rope, and utility lines.
- Available in multiple sizes for use in .500″ (12,7 mm) to 1.500″ (38,1 mm) diameter holes.





Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick Specs

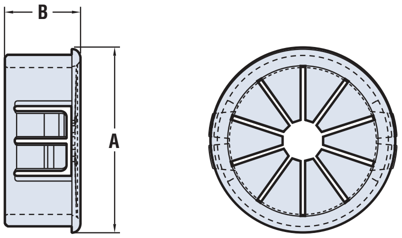
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Open/Closed Universal Bushings

- Split design allows side entry and encirclement of preassembled harnesses, power cords, capillary tubes or other assemblies that have segments larger than the bushing's ID.
- Parts can be assembled into holes that already contain cables or tubing.
- Only fingertip pressure required to snap-lock the bushing into its mounting hole.
- Flexible shutters adjust to accommodate and support any shape from .125″ to a maximum diameter of 1.062″.
- Absorbs vibration, cushions and insulates cables, tubing, hoses or shafts with limited internal clearance.
- Available in multiple sizes for use in .500″ (12,7 mm) to 1.500″ (38,1 mm) diameter holes.

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		Maximum Inside Diameter		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.125	3,2	.500	12,7	**H-2055SP**	OCUB-500	.312	7,6	.562	14,3	.385	9,8
.125	3,2	.625	15,9	**H-2077SP**	OCUB-625	.437	11,1	.718	18,2	.406	10,3
.125	3,2	.750	19,0	**H-2089SP**	OCUB-750	.500	12,7	.812	20,6	.406	10,3
.125	3,2	.875	22,2	**H-2119SP**	OCUB-875	.562	14,3	.921	23,4	.406	10,3
.125	3,2	1.000	25,4	**H-2137SP**	OCUB-1000	.750	19,0	1.062	27,0	.406	10,3
.125	3,2	1.093	27,8	**H-2157SP**	OCUB-1093	.812	20,6	1.187	30,2	.406	10,3
.125	3,2	1.250	31,8	**H-2196SP**	OCUB-1250	.937	23,8	1.468	37,3	.406	10,3
.125	3,2	1.375	34,9	**H-2184SP**	OCUB-1375	1.000	25,4	1.468	37,3	.406	10,3
.125	3,2	1.500	38,1	**H-2213SP**	OCUB-1500	1.062	26,9	1.578	40,1	.421	10,7

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to maximum panel thickness.



Quick Specs

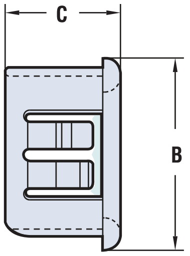
Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' File E15331** **Certified by the Canadian Standards Association File LR8919.**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).**

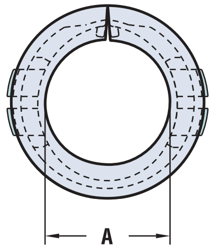
Heyco® Open/Closed Bushings

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.125	3,2	.375	9,5	**H-2865**	OCB-375	.265	6,7	.421	10,7	.390	9,9
.125	3,2	.437	11,1	**H-2867**	OCB-437	.330	8,4	.500	12,7	.406	10,3
.125	3,2	.500	12,7	**H-2871**	OCB-500	.312	7,9	.562	14,3	.406	10,3
.125	3,2	.562	14,3	**H-2869**	OCB-562	.390	9,9	.640	16,3	.406	10,3
.125	3,2	.625	15,9	**H-2872**	OCB-625	.453	11,5	.687	17,5	.406	10,3
.125	3,2	.750	19,0	**H-2873**	OCB-750	.546	13,9	.796	20,2	.406	10,3
.125	3,2	.875	22,2	**H-2874**	OCB-875	.671	17,7	.921	23,4	.406	10,3
.125	3,2	1.000	25,4	**H-2878**	OCB-1000	.812	20,6	1.047	26,6	.406	10,3
.125	3,2	1.093	27,8	**H-2879**	OCB-1093	.875	22,2	1.156	29,4	.406	10,3
.125	3,2	1.250	31,8	**H-2881**	OCB-1250	1.046	26,6	1.343	34,1	.406	10,3
.125	3,2	1.375	34,9	**H-2882**	OCB-1375	1.171	29,7	1.468	37,3	.406	10,3
.125	3,2	1.500	38,1	**H-2883**	OCB-1500	1.250	31,7	1.578	40,1	.421	10,7

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to maximum panel thickness.

- Multiple sizes for use in mounting holes from .375˝ (9,5 mm) to 1.500˝ (38,1 mm).
- Split design allows side entry and encirclement of preassembled harnesses, capillary tubes or other assemblies that have segments larger than the bushing's ID.
- May also be assembled into holes that already contain cable, wire or other filaments.
- Fingertip pressure snap-locks the bushing into its mounting hole.





Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

Quick Specs

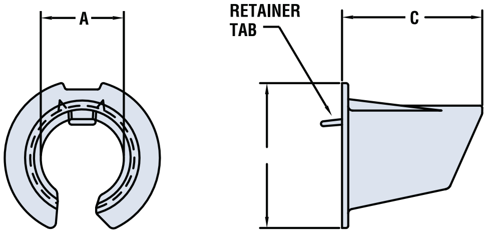
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Armor Bushings

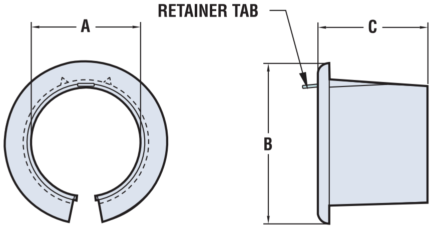
- Use with Flexible Armored Cable (BX) and Flexible Metallic Conduit (FMC), to insulate rough cut conduit ends.
- Suitable for installation at temperatures up to 194°F (90°C) and as low as -40°F (-40°C).
- Chamfered lead-in allows for fast installation.
- Size-marked for easy identification.
- Molded of high dielectric polyethylene.

WILL FIT THESE ARMORED CABLES (AWG/CONDUCTORS)	PART NO.	DESCRIPTION	PART DIMENSIONS					
			A Inside Diameter		B Head Diameter		C Overall Height	
	Red		in.	mm.	in.	mm.	in.	mm.
14/2, 14/3, 12/2, 12/3	**H-2264**	AB-0	.37	9,4	.68	17,3	.58	14,7
14/4, 6/1, 4/1	**H-2265**	AB-1	.44	11,2	.70	17,8	.63	16,0
12/4, 10/2, 10/3, 2/1	**H-2266**	AB-2	.57	14,0	.85	21,6	.60	15,2
10/4, 8/2, 8/3, 1/1	**H-2267**	AB-3	.73	18,5	1.02	25,9	.60	15,2
12/4, 10/2, 10/3, 2/1	**H-2281***	AB-Orange	.58	14,7	.90	22,9	.50	12,7

Standard color red.
*This part is not UL or CSA certified.



2264/2265



2266/2267

Quick Specs

Material	High Dielectric Polyethylene
Certifications	Ⓤ Listed under Underwriters' Laborotories File E51579 Ⓢ Certified by the Canadian Standards Association File 213253
Temperature Rating	-40°F (-40°C) to 194°F (90°C)

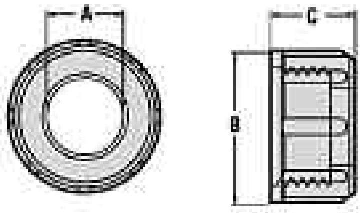
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Threaded Insulated Bushings

TRADE SIZE NPT	PART NO. Black	DESCRIPTION	PART DIMENSIONS A Inside Diameter in.	mm.	B Head Diameter in.	mm.	C Overall Height in.	mm.
1/8	**H-2282**	IB-1/8	.268	6,8	.530	13,4	.296	7,6
1/4	**H-2284**	IB-1/4 Phen.	.348	8,8	.715	18,2	.363	9,3
3/8	**H-2286**	IB-3/8 Phen.	.468	11,9	.875	22,2	.466	11,8

Standard color black. Consult ESTCO for white and other colors..

- Converts raw-edge pipe ends with NPT threads to smooth insulated ends.
- Insulates and mechanically protects lamp cords, other electrical and communications cables, tubing, hose, rope, and utility lines.
- 1/4" and 3/8" NPT sizes molded of phenolic material.
- 1/8″ NPT size molded of type 6/6 Nylon.
- Quick Specs below do not apply.

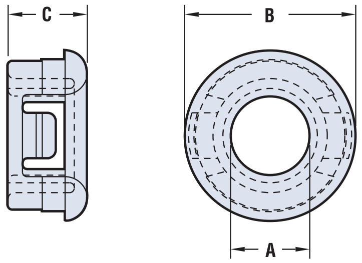


Heyco® Double Insulated Bushings

PANEL DIMENSIONS Maximum Thickness in.	mm.	Mounting Hole Diameter in.	mm.	PART NO. Black	DESCRIPTION	PART DIMENSIONS A Inside Diameter in.	mm.	B Head Diameter in.	mm.	C Overall Height in.	mm.
.062	1,6	.500	12,7	**H-2514**	S50	.250	6,4	.562	14,3	.265	6,7
.062	1,6	.875	22,2	**H-2540**	S87	.520	13,2	.980	24,9	.320	8,1
.125	3,2	.875	22,2	**H-2552**	S875-562	.562	14,3	.980	24,9	.516	13,1

Standard color black. Consult ESTCO for white and other colors..

- Extra internal insulating sleeve creates a smooth bore and prevents locking fingers from protruding into the ID of the Bushing.
- Large radius exit hole.



Quick Specs

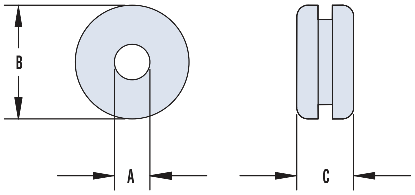
Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' File E15331 Certified by the Canadian Standards Association File LR8919.
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C).

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Rubber Grommets

Mounting Diameter: 0.250″ to 0.562″

- Used to protect or cover through holes. Help eliminate sharp edges so your wires are protected and add aesthetic value to your application.
- 160 sizes available that will accommodate mounting holes ranging from .250″ (6,4 mm) to holes as large as 2.50″ (63,5 mm) diameter and panel thicknesses from .063″ (1,6 mm) to .375″ (9,5 mm).
- Rubber grommets are constructed of SBR with an operating temperature range of -40°F (-40°C) to 221°F (105°C).
- SBR grommets have good water resistant characteristics and are suitable for most moderate chemicals and wet or dry organic acids.



PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.063	1,6	.250	6,4	**H-G1004**	RG 250-4-2	.125	3,2	.344	8,7	.188	4,8
.063	1,6	.250	6,4	**H-G1005**	RG 250-5-2	.156	4,0	.375	9,5	.188	4,8
.063	1,6	.250	6,4	**H-G1006**	RG 250-5-2A	.156	4,0	.438	11,1	.375	9,5
.094	2,4	.281	7,1	**H-G1010**	RG 281-6-3	.188	4,8	.438	11,1	.219	5,6
.063	1,6	.312	7,9	**H-G1017**	RG 312-6-2	.188	4,8	.406	10,3	.219	5,6
.063	1,6	.312	7,9	**H-G1018**	RG 312-6-2A	.188	4,8	.438	11,1	.188	4,8
.063	1,6	.312	7,9	**H-G1019**	RG 312-6-2B	.188	4,8	.500	12,7	.250	6,4
.094	2,4	.312	7,9	**H-G1014**	RG 312-6-3	.188	4,8	.500	12,7	.281	7,1
.125	3,2	.312	7,9	**H-G1020**	RG 312-6-4	.188	4,8	.438	11,8	.250	6,4
.188	4,8	.312	7,9	**H-G1022**	RG 312-6-6	.188	4,8	.438	11,8	.313	8,0
.250	6,4	.312	7,9	**H-G1023**	RG 312-6-8	.188	4,8	.438	11,8	.375	9,5
.063	1,6	.312	7,9	**H-G1026**	RG 312-7-2	.219	5,6	.438	11,8	.188	4,8
.094	2,4	.375	9,5	**H-G1033**	RG 375-4-3	.125	3,2	.500	12,7	.313	8,0
.188	4,8	.375	9,5	**H-G1034**	RG 375-6-6	.188	4,8	.625	15,9	.375	9,5
.063	1,6	.375	9,5	**H-G1037**	RG 375-8-2	.250	6,4	.563	14,3	.250	6,4
.094	2,4	.375	9,5	**H-G1038**	RG 375-8-3	.250	6,4	.500	12,7	.250	6,4
.094	2,4	.375	9,5	**H-G1039**	RG 375-8-3A	.250	6,4	.563	14,3	.281	7,1
.063	1,6	.375	9,5	**H-G1042**	RG 375-9-2	.281	7,1	.563	14,3	.250	6,4
.375	9,5	.375	9,5	**H-G1043**	RG 375-10-12	.313	8,0	.563	14,3	.500	12,7
.125	3,2	.406	10,3	**H-G1047**	RG 406-9-4	.281	7,1	.625	15,9	.375	9,5
.063	1,6	.437	11,1	**H-G1052**	RG 437-8-2	.250	6,4	.625	15,9	.188	4,8
.063	1,6	.437	11,1	**H-G1053**	RG 437-8-2A	.250	6,4	.625	15,9	.313	8,0
.125	3,2	.437	11,1	**H-G1056**	RG 437-8-4	.250	6,4	.625	15,9	.250	6,4
.188	4,8	.437	11,1	**H-G1057**	RG 437-8-6	.250	6,4	.625	15,9	.313	8,0
.250	6,4	.437	11,1	**H-G1058**	RG 437-8-8	.250	6,4	.625	15,9	.375	9,5
.063	1,6	.437	11,1	**H-G1061**	RG 437-10-2	.313	8,0	.625	15,9	.281	7,1
.094	2,4	.437	11,1	**H-G1062**	RG 437-10-3	.313	8,0	.625	15,9	.313	8,0
.250	6,4	.500	12,7	**H-G1086**	RG 500-10-8	.313	8,0	.625	15,9	.625	15,9
.063	1,6	.500	12,7	**H-G1089**	RG 500-12-2	.375	9,5	.625	15,9	.250	6,4
.063	1,6	.500	12,7	**H-G1090**	RG 500-12-2A	.375	9,5	.688	17,5	.281	7,1
.125	3,2	.500	12,7	**H-G1092**	RG 500-12-4	.375	9,5	.625	15,9	.313	8,0
.125	3,2	.500	12,7	**H-G1093**	RG 500-12-4A	.375	9,5	.625	15,9	.406	10,3
.156	4,0	.500	12,7	**H-G1094**	RG 500-12-5	.375	9,5	.688	17,5	.313	8,0
.250	6,4	.500	12,7	**H-G1095**	RG 500-12-8	.375	9,5	.750	19,1	.500	12,7
.375	9,5	.500	12,7	**H-G1096**	RG 500-12-12	.375	9,5	.625	15,9	.625	15,9
.188	4,8	.562	14,3	**H-G1110**	RG 562-6-6	.188	4,8	.750	19,1	.312	7,9
.063	1,6	.562	14,3	**H-G1112**	RG 562-10-2	.313	8,0	.813	20,7	.313	8,0
.125	3,2	.562	14,3	**H-G1114**	RG 562-10-4	.313	8,0	.813	20,7	.375	9,5
.188	4,8	.562	14,3	**H-G1115**	RG 562-10-6	.313	8,0	.813	20,7	.375	9,5
.188	4,8	.562	14,3	**H-G1116**	RG 562-10-6A	.313	8,0	.813	20,7	.438	11,1

Standard color black.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

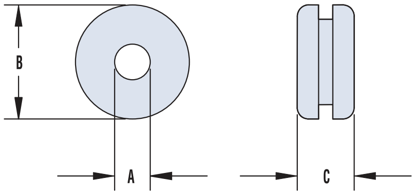
Heyco® Rubber Grommets

Mounting Diameter: 0.562″ to 0.875″

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.250	6,4	.562	14,3	**H-G1117**	RG 562-10-8	.313	8,0	.813	20,7	.500	12,7
.188	4,8	.562	14,3	**H-G1120**	RG 562-12-6	.375	9,5	.813	20,7	.375	9,5
.375	9,5	.562	14,3	**H-G1121**	RG 562-12-12	.375	9,5	.750	19,1	.750	19,1
.063	1,6	.562	14,3	**H-G1123**	RG 562-14-2	.438	11,1	.750	19,1	.250	6,4
.125	3,2	.625	15,9	**H-G1127**	RG 625-6-4	.188	4,8	.875	22,2	.250	6,4
.063	1,6	.625	15,9	**H-G1130**	RG 625-12-2	.375	9,5	.875	22,2	.313	8,0
.125	3,2	.625	15,9	**H-G1132**	RG 625-12-4	.375	9,5	.875	22,2	.375	9,5
.188	4,8	.625	15,9	**H-G1133**	RG 625-12-6	.375	9,5	.875	22,2	.438	11,1
.250	6,4	.625	15,9	**H-G1134**	RG 625-12-8	.375	9,5	.875	22,2	.500	12,7
.187	4,7	.625	15,9	**H-G1135**	RG 625-13-6	.400	10,2	1.100	27,9	.435	11,1
.375	9,5	.625	15,9	**H-G1136**	RG 625-13-12	.406	10,3	.813	20,7	.625	15,9
.063	1,6	.625	15,9	**H-G1137**	RG 625-16-2	.500	12,7	.813	20,7	.281	7,1
.110	2,8	.630	16,0	**H-G1140**	RG 630-16-4	.500	12,7	.810	20,6	.300	7,6
.063	1,6	.687	17,5	**H-G1150**	RG 687-14-2	.438	11,8	.938	23,8	.313	8,0
.063	1,6	.687	17,5	**H-G1151**	RG 687-14-2A	.438	11,1	.938	23,8	.348	8,8
.125	3,2	.687	17,5	**H-G1152**	RG 687-14-4	.438	11,1	.938	23,8	.375	9,5
.188	4,8	.687	17,5	**H-G1153**	RG 687-14-6	.438	11,1	.938	23,8	.438	11,1
.250	6,4	.687	17,5	**H-G1154**	RG 687-14-8	.438	11,1	.938	23,8	.500	12,7
.063	1,6	.687	17,5	**H-G1155**	RG 687-16-2	.500	12,7	.875	22,2	.250	6,4
.188	4,8	.750	19,1	**H-G1172**	RG 750-10-6	.313	8,0	1.000	25,4	.438	11,1
.063	1,6	.750	19,1	**H-G1174**	RG 750-12-2	.375	9,5	1.000	25,4	.375	9,5
.063	1,6	.750	19,1	**H-G1176**	RG 750-16-2	.500	12,7	.875	22,2	.250	6,4
.063	1,6	.750	19,1	**H-G1177**	RG 750-16-2A	.500	12,7	1.000	25,4	.250	6,4
.094	2,4	.750	19,1	**H-G1178**	RG 750-16-3	.500	12,7	.875	22,2	.344	8,7
.094	2,4	.750	19,1	**H-G1179**	RG 750-16-3A	.500	12,7	.969	24,6	.281	7,1
.156	4,0	.750	19,1	**H-G1181**	RG 750-16-5	.500	12,7	.938	23,8	.406	10,3
.375	9,5	.750	19,1	**H-G1182**	RG 750-16-12	.500	12,7	1.000	25,4	.625	15,9
.125	3,2	.812	20,6	**H-G1188**	RG 812-12-4	.375	9,5	1.063	27,0	.375	9,5
.313	8,0	.812	20,6	**H-G1191**	RG 812-14-10	.438	11,1	1.063	27,0	.625	15,9
.063	1,6	.812	20,6	**H-G1192**	RG 812-16-2	.500	12,7	1.063	27,0	.313	8,0
.125	3,2	.812	20,6	**H-G1193**	RG 812-16-4	.500	12,7	1.063	27,0	.375	9,5
.188	4,8	.812	20,6	**H-G1194**	RG 812-16-6	.500	12,7	1.063	27,0	.438	11,1
.250	6,4	.812	20,6	**H-G1195**	RG 812-16-8	.500	12,7	1.063	27,0	.500	12,7
.063	1,6	.812	20,6	**H-G1197**	RG 812-18-2	.563	14,3	1.063	27,0	.313	8,0
.125	3,2	.812	20,6	**H-G1198**	RG 812-18-4	.563	14,3	1.062	26,9	.375	9,5
.188	4,8	.812	20,6	**H-G1199**	RG 812-18-6	.563	14,3	1.063	27,0	.438	11,1
.250	6,4	.812	20,6	**H-G1200**	RG 812-18-8	.563	14,3	1.063	27,0	.500	12,7
.063	1,6	.875	22,2	**H-G1208**	RG 875-10-2	.313	8,0	1.375	34,9	.250	6,4
.188	4,8	.875	22,2	**H-G1213**	RG 875-18-6	.563	14,3	1.063	27,0	.438	11,1
.375	9,5	.875	22,2	**H-G1214**	RG 875-18-12	.563	14,3	1.063	27,0	.625	15,9

Standard color black.

- Used to protect or cover through holes. Help eliminate sharp edges so your wires are protected and add aesthetic value to your application.
- 160 sizes available that will accommodate mounting holes ranging from .250″ (6,4 mm) to holes as large as 2.50″ (63,5 mm) diameter and panel thicknesses from .063″ (1,6 mm) to .375″ (9,5 mm).
- Rubber grommets are constructed of SBR with an operating temperature range of -40°F (-40°C) to 221°F (105°C).
- SBR grommets have good water resistant characteristics and are suitable for most moderate chemicals and wet or dry organic acids.

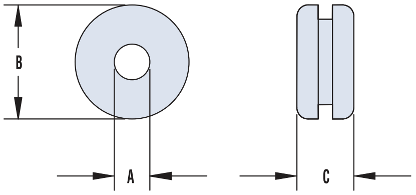


ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Rubber Grommets

Mounting Diameter: 0.875″ to 1.250″

- • Used to protect or cover through holes. Help eliminate sharp edges so your wires are protected and add aesthetic value to your application.
- • 160 sizes available that will accommodate mounting holes ranging from .250″ (6,4 mm) to holes as large as 2.50″ (63.5 mm) diameter and panel thicknesses from .063″ (1,6mm) to .375″ (9,5 mm).
- • Rubber grommets are constructed of SBR with an operating temperature range of -40°F (-40°C) to 221°F (105°C).
- • SBR grommets have good water resistant characteristics and are suitable for most moderate chemicals and wet or dry organic acids.



PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.063	1,6	.875	22,2	**H-G1215**	RG875-20-2	.625	15,9	1.125	28,6	.313	8,0
.125	3,2	.875	22,2	**H-G1218**	RG 875-20-4	.625	15,9	1.125	28,6	.375	9,5
.188	4,8	.875	22,2	**H-G1219**	RG 875-20-6	.625	15,9	1.125	28,6	.438	11,1
.250	6,4	.875	22,2	**H-G1220**	RG 875-20-8	.625	15,9	1.125	28,6	.500	12,7
.313	8,0	.906	23,0	**H-G1224**	RG 906-20-10	.625	15,9	1.125	28,6	.625	15,9
.375	9,5	.968	24,6	**H-G1232**	RG 968-22-12	.688	17,5	1.313	33,4	.625	15,9
.063	1,6	1.000	25,4	**H-G1242**	RG 1000-12-2	.375	9,5	1.250	31,8	.250	6,4
.125	3,2	1.000	25,4	**H-G1244**	RG 1000-12-4	.375	9,5	1.313	33,4	.375	9,5
.063	1,6	1.000	25,4	**H-G1246**	RG 1000-16-2	.500	12,7	1.250	31,8	.250	6,4
.125	3,2	1.000	25,4	**H-G1247**	RG 1000-16-4	.500	12,7	1.250	31,8	.313	8,0
.266	6,8	1.000	25,4	**H-G1248**	RG 1000-16-8	.500	12,7	1.375	34,9	.500	12,7
.375	9,5	1.000	25,4	**H-G1249**	RG 1000-18-12	.563	14,3	1.250	31,8	.625	15,9
.063	1,6	1.000	25,4	**H-G1252**	RG 1000-22-2	.688	17,5	1.313	33,4	.375	9,5
.078	2,0	1.000	25,4	**H-G1253**	RG 1000-22-3	.688	17,5	1.312	33,3	.375	9,5
.125	3,2	1.000	25,4	**H-G1255**	RG 1000-22-4	.688	17,5	1.313	33,4	.438	11,1
.188	4,8	1.000	25,4	**H-G1256**	RG 1000-22-6	.688	17,5	1.313	33,4	.500	12,7
.250	6,4	1.000	25,4	**H-G1257**	RG 1000-22-8	.688	17,5	1.313	33,4	.563	14,3
.063	1,6	1.000	25,4	**H-G1258**	RG 1000-24-2	.750	19,1	1.250	31,8	.297	7,5
.125	3,2	1.000	25,4	**H-G1259**	RG 1000-24-4	.750	19,1	1.188	30,2	.375	9,5
.125	3,2	1.000	25,4	**H-G1260**	RG 1000-24-4A	.750	19,1	1.250	31,8	.375	9,5
.188	4,8	1.000	25,4	**H-G1261**	RG 1000-24-6	.750	19,1	1.250	31,8	.563	14,3
.250	6,4	1.000	25,4	**H-G1264**	RG 1000-28-8	.875	22,2	1.250	31,8	.625	15,9
.063	1,6	1.062	27,0	**H-G1269**	RG 1062-24-2	.750	19,1	1.375	34,9	.375	9,5
.188	4,8	1.062	27,0	**H-G1272**	RG 1062-24-6	.750	19,1	1.375	34,9	.500	12,7
.250	6,4	1.062	27,0	**H-G1273**	RG 1062-24-8	.750	19,1	1.375	34,9	.563	14,3
.375	9,5	1.125	28,6	**H-G1278**	RG 1125-24-12	.750	19,1	1.625	41,3	.125	28,6
.257	6,5	1.125	28,6	**H-G1279**	RG 1125-26-8	.804	20,4	1.375	34,9	.506	12,9
.094	2,4	1.125	28,6	**H-G1281**	RG 1125-28-3	.875	22,2	1.500	38,1	.344	8,7
.141	3,6	1.187	30,2	**H-G1288**	RG 1187-28-5	.875	22,2	1.375	34,9	.406	10,3
.063	1,6	1.250	31,8	**H-G1290**	RG 1250-16-2	.500	12,7	1.500	38,1	.250	6,4
.125	3,2	1.250	31,8	**H-G1291**	RG 1250-16-4	.500	12,7	1.500	38,1	.313	8,0
.063	1,6	1.250	31,8	**H-G1294**	RG 1250-20-2	.625	15,9	1.500	38,1	.250	6,4
.063	1,6	1.250	31,8	**H-G1298**	RG 1250-24-2	.750	19,1	1.625	41,3	.250	6,4
.125	3,2	1.250	31,8	**H-G1299**	RG 1250-24-4	.750	19,1	1.625	41,3	.313	8,0
.250	6,4	1.250	31,8	**H-G1301**	RG 1250-24-8	.750	19,1	1.625	41,3	.438	11,1
.063	1,6	1.250	31,8	**H-G1303**	RG 1250-28-2	.875	22,2	1.625	41,3	.438	11,1
.125	3,2	1.250	31,8	**H-G1304**	RG 1250-28-4	.875	22,2	1.625	41,3	.500	12,7
.188	4,8	1.250	31,8	**H-G1306**	RG 1250-28-6	.875	22,2	1.625	41,3	.563	14,3
.250	6,4	1.250	31,8	**H-G1307**	RG 1250-28-8	.875	22,2	1.625	41,3	.625	15,9
.375	9,5	1.250	31,8	**H-G1308**	RG 1250-28-12	.875	22,2	1.750	44,5	.750	19,1

Standard color black.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

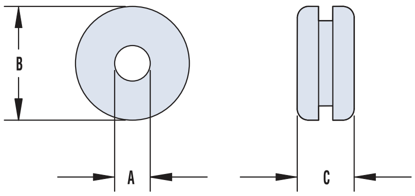
Heyco® Rubber Grommets

Mounting Diameter: 1.250˝ to 2.500˝

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS					
Maximum Thickness		Mounting Hole Diameter		Black		A Inside Diameter		B Head Diameter		C Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.063	1,6	1.250	31,8	**H-G1311**	RG 1250-32-2	1.000	25,4	1.563	39,7	.313	8,0
.188	4,8	1.250	31,8	**H-G1312**	RG 1250-32-6	1.000	25,4	1.500	38,1	.438	11,1
.375	9,5	1.250	31,8	**H-G1314**	RG 1250-32-12	1.000	25,4	1.500	38,1	.625	15,9
.063	1,6	1.375	34,9	**H-G1320**	RG 1375-32-2	1.000	25,4	1.750	44,5	.438	11,1
.125	3,2	1.375	34,9	**H-G1322**	RG 1375-32-4	1.000	25,4	1.750	44,5	.500	12,7
.188	4,8	1.375	34,9	**H-G1323**	RG 1375-32-6	1.000	25,4	1.750	44,5	.563	14,3
.250	6,4	1.375	34,9	**H-G1324**	RG 1375-32-8	1.000	25,4	1.750	44,5	.625	15,9
.375	9,5	1.375	34,9	**H-G1326**	RG 1375-32-12	1.000	25,4	1.750	44,5	.750	19,1
.188	4,8	1.375	34,9	**H-G1329**	RG 1375-36-6	1.125	28,6	1.875	47,6	.500	12,7
.063	1,6	1.500	38,1	**H-G1347**	RG 1500-36-2	1.125	28,6	1.875	47,6	.375	9,5
.156	4,0	1.500	38,1	**H-G1348**	RG 1500-38-5	1.188	30,2	1.750	44,5	.406	10,3
.063	1,6	1.500	38,1	**H-G1349**	RG 1500-40-2	1.250	31,8	1.875	47,6	.344	8,7
.125	3,2	1.500	38,1	**H-G1350**	RG 1500-40-4	1.250	31,8	1.875	47,6	.406	10,3
.188	4,8	1.500	38,1	**H-G1351**	RG 1500-40-6	1.250	31,8	2.000	50,8	.625	15,9
.250	6,4	1.500	38,1	**H-G1353**	RG 1500-40-8	1.250	31,8	1.750	44,5	.500	12,7
.250	6,4	1.500	38,1	**H-G1354**	RG 1500-40-8A	1.250	31,8	2.000	50,8	.516	13,1
.125	3,2	1.625	41,3	**H-G1363**	RG 1625-42-4	1.313	33,4	2.000	50,8	.438	11,1
.125	3,2	1.625	41,3	**H-G1364**	RG 1625-44-4	1.375	34,9	1.875	47,6	.406	10,3
.063	1,6	1.750	44,5	**H-G1369**	RG 1750-48-2	1.500	38,1	2.125	54,0	.438	11,1
.125	3,2	1.750	44,5	**H-G1371**	RG 1750-48-4	1.500	38,1	2.125	54,0	.500	12,7
.188	4,8	1.750	44,5	**H-G1372**	RG 1750-48-6	1.500	38,1	2.125	54,0	.563	14,3
.250	6,4	1.750	44,5	**H-G1373**	RG 1750-48-8	1.500	38,1	2.000	50,8	.500	12,7
.250	6,4	1.750	44,5	**H-G1374**	RG 1750-48-8A	1.500	38,1	2.125	54,0	.625	15,9
.375	9,5	1.750	44,5	**H-G1375**	RG 1750-48-12	1.500	38,1	2.125	54,0	.750	19,1
.094	2,4	2.000	50,8	**H-G1387**	RG 2000-48-3	1.500	38,1	2.375	60,3	.375	9,5
.188	4,8	2.000	50,8	**H-G1390**	RG 2000-52-6	1.625	41,3	2.250	57,2	.750	19,1
.125	3,2	2.000	50,8	**H-G1392**	RG 2000-56-4	1.750	44,5	2.375	60,3	.375	9,5
.250	6,4	2.000	50,8	**H-G1393**	RG 2000-56-8	1.750	44,5	2.500	63,5	.531	13,5
.250	6,4	2.000	50,8	**H-G1394**	RG 2000-56-8A	1.750	44,5	2.500	63,5	.560	14,2
.375	9,5	2.000	50,8	**H-G1395**	RG 2000-56-12	1.750	44,5	2.500	63,5	.625	15,9
.190	4,8	2.200	55,9	**H-G1404**	RG 2.200-64-6	2.000	50,8	2.750	69,9	.560	14,2
.063	1,6	2.375	60,3	**H-G1409**	RG 2.375-40-2	1.250	31,8	2.750	69,9	.438	11,1
.190	4,8	2.375	60,3	**H-G1414**	RG 2.375-64-6	2.000	50,8	2.750	69,9	.560	14,2
.063	1,6	2.500	63,5	**H-G1418**	RG 2.5-40-2	1.250	31,8	2.875	73,0	.438	11,1
.250	6,4	2.500	63,5	**H-G1421**	RG 2.5-64-8	2.000	50,8	3.000	76,2	.563	14,3
.063	1,6	2.500	63,5	**H-G1422**	RG 2.5-68-2	2.125	54,0	2.875	73,0	.438	11,1
.125	3,2	2.500	63,5	**H-G1423**	RG 2.5-68-4	2.125	54,0	2.875	73,0	.438	11,1
.250	6,4	2.500	63,5	**H-G1425**	RG 2.5-72-8	2.250	57,2	3.000	76,2	.625	15,9
.328	8,3	2.500	63,5	**H-G1426**	RG 2.5-72-10	2.250	57,2	3.000	76,2	.719	18,3
.375	9,5	2.500	63,5	**H-G1427**	RG 2.5-72-12	2.250	57,2	3.000	76,2	.750	19,1

Standard color black.

- • Used to protect or cover through holes. Help eliminate sharp edges so your wires are protected and add aesthetic value to your application.
- • 160 sizes available that will accommodate mounting holes ranging from .250˝ (6,4 mm) to holes as large as 2.50˝ (63,5 mm) diameter and panel thicknesses from .063˝ (1,6 mm) to .375˝ (9,5 mm).
- • Rubber grommets are constructed of SBR with an operating temperature range of -40°F (-40°C) to 221°F (105°C).
- • SBR grommets have good water resistant characteristics and are suitable for most moderate chemicals and wet or dry organic acids.



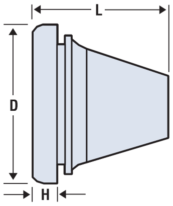
ISO 9001:2000 Certified
CERTIFICATE # 08-511

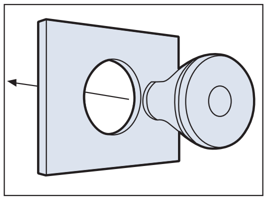
Heyco® Snap-in PG Liquid Tight Bushings

- Can be used in threaded or unthreaded holes.
- Ozone and weather resistant.
- Provides light strain relief to the cable.
- Simple to install–just snap into place, pierce thin membrane, insert & pull back cable.
- Can be used as a liquid tight plug. Offers protection to IP 67.
- Sizes available to fit cable diameters ranging from .12˝ (3,0 mm) up to 1.38˝ (35,0 mm).

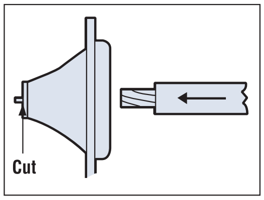
PANEL DIMENSIONS						CABLE DIA. RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS						
Hole Dia.		Thickness Range				Min.		Max.		Grey		D Head Dia.		H Overall Height		L Head Thickness		Hole Size
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
.52	13,2	.04	1,0	.16	4,0	.12	3,0	.20	5,0	**H-4014**	LTB 30-50/PG7	.79	20,0	.24	6,1	.50	12,8	PG7
.63	16,0	.04	1,0	.16	4,0	.20	5,0	.28	7,0	**H-4015**	LTB 50-70/PG9	.79	20,0	.28	7,1	.75	19,0	PG9
.75	19,0	.04	1,0	.16	4,0	.28	7,0	.39	10,0	**H-4016**	LTB 70-100/PG11	.94	24,0	.28	7,1	.81	20,6	PG11
.91	23,0	.04	1,0	.16	4,0	.31	8,0	.55	14,0	**H-4017**	LTB 80-140/PG16	1.10	28,0	.28	7,1	.89	22,5	PG16
1.14	29,0	.04	1,0	.16	4,0	.55	14,0	.79	20,0	**H-4018**	LTB 140-200/PG21	1.36	34,5	.28	7,1	1.02	26,0	PG21
1.50	38,0	.04	1,0	.16	4,0	.79	20,0	1.02	26,0	**H-4019**	LTB 200-260/PG29	1.81	46,0	.26	6,5	1.14	29,0	PG29
1.89	48,0	.04	1,0	.16	4,0	1.02	26,0	1.38	35,0	**H-4020**	LTB 260-350/PG36	2.26	57,5	.31	8,0	1.42	36,0	PG36

Standard color gray.

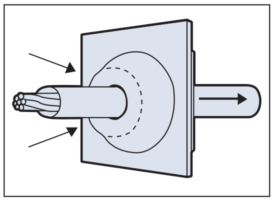




Snap Into Panel



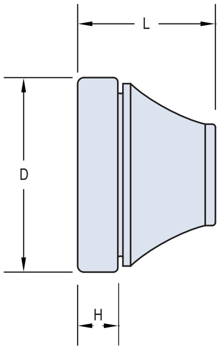
Cut as shown and Insert Cable



Pull Back Cable to Form Seal

Heyco® Snap-In Metric Liquid Tight Bushings

- For outdoor and indoor applications
- Good weather, UV, and ozone resistance



PANEL DIMENSIONS						CABLE DIA. RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS						
Hole Dia.		Thickness Range				Min.		Max.		Grey		D Head Dia.		H Overall Height		L Head Thickness		Hole Size
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
.49	12,5	.02	0,5	.08	2,0	.16	4,0	.28	7,0	**H-4007**	LTB 30-50/M12	.79	20,0	.22	5,6	.50	12,8	M12
.65	16,5	.04	1,0	.16	4,0	.20	5,0	.35	9,0	**H-4008**	LTB 50-70/M16	.83	21,0	.46	11,6	.70	17,7	M16
.81	20,5	.04	1,0	.16	4,0	.32	8,0	.51	13,0	**H-4009**	LTB 70-100/M20	1.00	25,5	.53	13,4	.79	20,0	M20
1.00	25,5	.04	1,0	.16	4,0	.43	11,0	.67	17,0	**H-4010**	LTB 100-140/M25	1.20	30,5	.60	15,3	.84	21,3	M25
1.28	32,5	.04	1,0	.16	4,0	.59	15,0	.79	20,0	**H-4011**	LTB 140-200/M32	1.52	38,5	.73	18,6	.97	24,6	M32
1.59	40,5	.04	1,0	.16	4,0	.75	19,0	1.10	28,0	**H-4012**	LTB 200-260/M40	1.91	48,5	.85	21,7	1.16	29,5	M40
1.99	50,5	.04	1,0	.16	4,0	1.06	27,0	1.38	35,0	**H-4013**	LTB 260-350/M50	2.38	60,5	.98	25,0	1.37	34,8	M50

Standard color gray.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

Material	Ethylene Propylene Diene Monomer Rubber (EPDM)
Temperature Rating	-40°F (-40°C) to 200°F (93°C)
IP Rating	IP 67

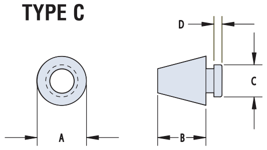
Heyco® Rubber Push-In Bumpers

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS								TYPE
Maximum Thickness		Mounting Hole Diameter		Black		A Base Diameter		B Base Height		C Insert Diameter		D Insert Height		
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	
.098	2,5	.118	3,0	**H-G2000**	RGB 118-236-4	.236	6,0	.118	3,0	.196	5,0	.472	12,0	T
.071	1,8	.125	3,2	**H-G2002**	RGB 125-334-6	.334	8,5	.189	4,9	.295	7,5	.429	10,9	T
.031	0,8	.156	4,0	**H-G2004**	RGB156-375-3	.375	9,5	.093	2,4	.218	5,5	.109	2,8	F
.059	1,5	.177	4,5	**H-G2006**	RGB 177-334-9	.334	8,5	.295	7,5	.236	6,0	.729	18,5	T
.109	2,8	.180	4,6	**H-G2007**	RGB 180-500-2	.500	12,7	.060	1,5	.250	6,4	.078	2,0	F
.047	1,2	.187	4,7	**H-G2009**	RGB 187-250-6	.250	6,4	.187	4,7	.031	0,8	.343	8,7	F
.047	1,2	.187	4,7	**H-G2010**	RGB 187-312-4	.312	7,9	.125	3,2	.250	6,4	.093	2,4	F
.050	1,3	.187	4,7	**H-G2011**	RGB 187-375-8	.375	9,5	.250	6,4	.250	6,4	.093	2,4	F
.062	1,6	.187	4,7	**H-G2012**	RGB 187-375-4	.375	9,5	.125	3,2	.250	6,4	.125	3,2	F
.062	1,6	.187	4,7	**H-G2013**	RGB 187-500-3	.500	12,7	.093	2,4	.250	6,4	.187	4,7	F
.078	2,0	.187	4,7	**H-G2014**	RGB 187-338-6	.338	8,6	.172	4,4	.250	6,4	.296	7,5	F
.093	2,4	.218	5,5	**H-G2016**	RGB 218-406-6	.406	10,3	.187	4,7	.281	7,1	.093	2,4	D
.125	3,2	.218	5,5	**H-G2017**	RGB 218-875-6	.875	22,2	.171	4,3	.343	8,7	.484	12,3	T
.047	1,2	.250	6,4	**H-G2019**	RGB 250-437-6	.437	11,1	.187	4,7	.312	7,9	.125	3,2	F
.047	1,2	.250	6,4	**H-G2020**	RGB 250-500-6	.500	12,7	.171	4,3	.312	7,9	.187	4,7	D
.050	1,3	.250	6,4	**H-G2021**	RGB 250-562-12	.562	14,3	.375	9,5	.340	8,6	.265	6,7	F
.062	1,6	.250	6,4	**H-G2022**	RGB 250-375-4	.375	9,5	.125	3,2	.312	7,9	.062	1,6	F
.062	1,6	.250	6,4	**H-G2023**	RGB250-375-4R	.375	9,5	.125	3,2	.312	7,9	.062	1,6	F
.062	1,6	.250	6,4	**H-G2024**	RGB 250-500-5	.500	12,7	.156	4,0	.312	7,9	.125	3,2	F
.062	1,6	.250	6,4	**H-G2025**	RGB 250-500-8	.500	12,7	.250	6,4	.312	7,9	.125	3,2	F
.125	3,2	.250	6,4	**H-G2026**	RGB 250-406-7	.406	10,3	.218	5,5	.343	8,7	.062	1,6	F
.125	3,2	.250	6,4	**H-G2027**	RGB 250-562-4	.562	14,3	.125	3,2	.343	8,7	.125	3,2	F
.047	1,2	.281	7,1	**H-G2029**	RGB 281-500-2	.500	12,7	.062	1,6	.375	9,5	.156	4,0	F
.047	1,2	.281	7,1	**H-G2030**	RGB 281-500-4	.500	12,7	.125	3,2	.375	9,5	.156	4,0	F
.078	2,0	.281	7,1	**H-G2031**	RGB 281-562-4	.562	14,3	.125	3,2	.375	9,5	.156	4,0	F
.125	3,2	.281	7,1	**H-G2032**	RGB 281-625-11	.625	15,9	.343	8,7	.437	11,1	.171	4,3	F
.047	1,2	.312	7,9	**H-G2034**	RGB 312-1250-3	.250	28,6	.093	2,4	.437	11,1	.078	2,0	F
.062	1,6	.312	7,9	**H-G2035**	RGB 312-375-5	.375	9,5	.156	4,0	.375	9,5	.156	4,0	D
.078	2,0	.312	7,9	**H-G2036**	RGB 312-875-4	.875	22,2	.125	3,2	.500	12,7	.062	1,6	F
.093	2,4	.312	7,9	**H-G2037**	RGB 312-625-8	.625	15,9	.250	6,4	.375	9,5	.125	3,2	F
.094	2,4	.328	8,3	**H-G2039**	RGB 328-846-6	.846	21,5	.187	4,7	.421	10,7	.265	6,7	D
.125	3,2	.375	9,5	**H-G2041**	RGB 375-765-24	.765	19,4	.750	19,1	.500	12,7	.125	3,2	C
.125	3,2	.500	12,7	**H-G2043**	RGB 500-1000-6	1.000	25,4	.187	4,7	.625	15,9	.125	3,2	D
.188	4,8	.500	12,7	**H-G2044**	RGB 500-1000-10	1.000	25,4	.312	7,9	.687	17,4	.187	4,7	F

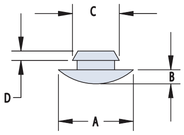
Standard color black.

- Rubber bumpers are designed for through hole protection.
- Designed to fit snugly into your opening and not let air, water, etc. pass through.
- Can also be used as feet.
- Rubber bumpers are constructed of SBR
  with an operating temperature of -40°F (-40°C) to 221°F (105°C).

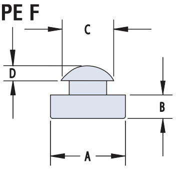
TYPE C



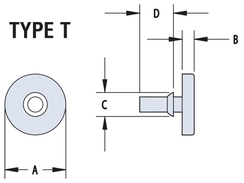
TYPE D



TYPE F



TYPE T



ISO 9001:2000 Certified
CERTIFICATE # 08-511

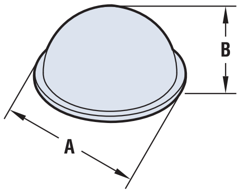
Heyco® Polyurethane Adhesive Backed Bumpers

Hemispherical

- Bumpers can be attached to a wide variety of surfaces; aluminum, ceramic, formica, glass, painted surfaces, polyethylene, polypropylene, vinyl, and steel.
- Quick and easy installation–simply peel off backing and press into place. With no holes to drill, and no screws or rivets needed, adhesive backed bumpers will save you time and money.
- Adhesive backed bumpers are nonmarking, nonstaining, skid, and scratch resistant.
- Surface must be clean, dry, and free of grease, oil, and other common solvents to obtain maximum adhesion. Clean surfaces with low strength solvents such as Isopropyl Alcohol or Heptane.
- Recommended storage guidelines: temperature range 40°F (40°C) to 75°F (24°C), humidity range 40% to 60%.
- Clear parts have an anti-yellowing agent.
- Clear bumpers have acrylic-based pressure sensitive adhesive with an end use temperature of 0°F (-18°C) to 250°F (121°C). Black bumpers have a rubber-based pressure sensitive adhesive with an end use temperature of 0°F (-18°C) to 180°F (82°C).

PART NO.					DESCRIPTION	PART SPECIFICATION/DIMENSIONS				
Clear	Black	White	Gray	Brown		A Diameter		B Height		Pieces per Pad
						in.	mm.	in.	mm.	
H-N040	**H-N140**	**H-N240**	**H-N340**	**H-N440**	HBA 250-06	.25	6,4	.06	1,6	578
H-N007	**H-N107**	**H-N207**	**H-N307**	**H-N407**	HBA 335-09	.34	8,6	.09	2,3	450
H-N012	**H-N112**	**H-N212**	**H-N312**	**H-N412**	HBA 375-15	.38	9,7	.15	3,8	200
H-N002	**H-N102**	**H-N202**	**H-N302**	**H-N402**	HBA 440-20	.44	11,2	.20	5,1	242
H-N015	**H-N115**	**H-N215**	**H-N315**	**H-N415**	HBA 620-31	.62	15,7	.31	7,9	128
H-N008	**H-N108**	**H-N208**	**H-N308**	**H-N408**	HBA 700-38	.70	17,8	.38	9,7	98
H-N039	**H-N139**	**H-N239**	**H-N339**	**H-N439**	HBA 750-08	.75	19,1	.08	2,0	84

Recognized under the Component Program of Underwriters' Laboratories File E196663.



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Polyurethane Adhesive Backed Bumpers

Cylindrical

PART NO.					DESCRIPTION	PART SPECIFICATION/DIMENSIONS				
Clear	Black	White	Gray	Brown		A Diameter		B Height		Pieces per Pad
						in.	mm.	in.	mm.	
H-N035	**H-N135**	**H-N235**	**H-N335**	**H-N435**	CBA 370-19	.37	9,4	.19	4,8	200
H-N005	**H-N105**	**H-N205**	**H-N305**	**H-N405**	CBA 500-06	.50	12,7	.06	1,5	200
H-N001	**H-N101**	**H-N201**	**H-N301**	**H-N401**	CBA 500-14	.50	12,7	.14	3,6	200
H-N006	**H-N106**	**H-N206**	**H-N306**	**H-N406**	CBA 500-25	.50	12,7	.25	6,4	200
H-N011	**H-N111**	**H-N211**	**H-N311**	**H-N411**	CBA 620-40	.62	15,7	.40	10,2	128
H-N024	**H-N124**	**H-N224**	**H-N324**	**H-N424**	CBA 810-12	.81	20,6	.12	3,0	72

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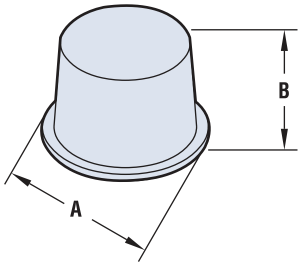


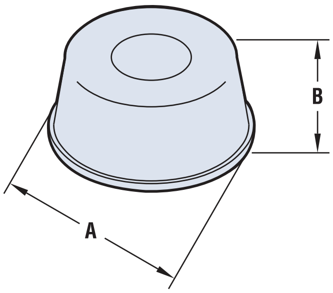
- Bumpers can be attached to a wide variety of surfaces: aluminum, ceramic, formica, glass, painted surfaces, polyethylene, polypropylene, vinyl, and steel.
- Quick and easy installation–simply peel off backing and press into place. With no holes to drill, and no screws or rivets needed, adhesive backed bumpers will save you time and money.

- Adhesive backed bumpers are nonmarking, nonstaining, skid, and scratch resistant.
- Surface must be clean, dry, and free of grease, oil, and other common solvents to obtain maximum adhesion. Clean surfaces with low strength solvents such as Isopropyl Alcohol or Heptane.
- Recommended storage guidelines: temperature range 40°F (40°C) to 75°F (24°C), humidity range 40% to 60%.
- Clear parts have an anti-yellowing agent.
- Clear bumpers have acrylic-based pressure sensitive adhesive with an end use temperature of 0°F (-18°C) to 250°F (121°C). Black bumpers have a rubber-based pressure sensitive adhesive with an end use temperature of 0°F (-18°C) to 180°F (82°C).

Cylindrical Depression

PART NO.					DESCRIPTION	PART SPECIFICATION/DIMENSIONS				
Clear	Black	White	Gray	Brown		A Diameter		B Height		Pieces per Pad
						in.	mm.	in.	mm.	
H-N018	**H-N118**	**H-N218**	**H-N318**	**H-N418**	CDBA 500-14	.50	12,7	.14	3,6	200
H-N017	**H-N117**	**H-N217**	**H-N317**	**H-N417**	CDBA 880-40	.88	22,4	.40	10,2	72
H-N030	**H-N130**	**H-N230**	**H-N330**	**H-N430**	CDBA 1810-60	1.81	46,0	.60	15,2	1

ᴿU Recognized under the Component Program of Underwriters' Laboratories File E196663.



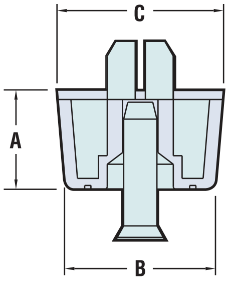
Heyco® Feets of Strength™

FSD–Feet with Drive Pin

- Molded of thermoplastic elastomer or polypropylene and elastomer blend for skid and vibration resistance.
- Two piece construction comes preassembled.
- To install, simply insert into the mounting hole, then press pin to secure.

PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS					
Mounting Hole Size		Thickness Range						A Overall Height		B Top Diameter		C Bottom Diameter	
		Minimum		Maximum		Black							
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.299	7,6	.031	0,8	.059	1,5	**H-2543**	FSD 3019-031	.197	5,0	.906	23,0	.984	25,0
.303	7,7	.197	5,0	.315	8,0	**H-2544**	FSD 3023-197	.236	6,0	.787	20,0	.827	21,0
.303	7,7	.031	0,8	.059	1,5	**H-2545**	FSD 3039-031	.394	10,0	.709	18,0	.787	20,0
.319	8,1	.031	0,8	.047	1,2	**H-2547**	FSD 3147-031	.472	12,0	.709	18,0	.787	20,0
.319	8,1	.031	0,8	.047	1,2	**H-2549**	FSD 3159-031	.591	15,0	.709	18,0	.787	20,0
.319	8,1	.031	0,8	.047	1,2	**H-2551**	FSD 3170-031	.709	18,0	.709	18,0	.787	20,0

Standard color black.



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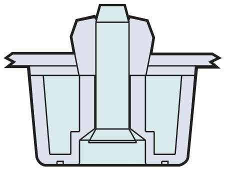

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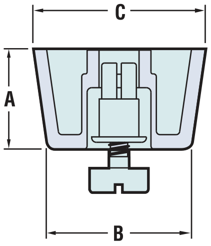
Heyco® Feets of Strength™

FSS–Feet with Slotted Screw Rivet

- An acetyl screw replaces the push rivet for fixing.
- Press screw to install; to release, use a conventional screwdriver.
- Molded from ethylene vinyl acetate.
- Installs with fingertip pressure.

PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS					
Mounting Hole Size		Thickness Range						A Overall Height		B Top Diameter		C Bottom Diameter	
		Minimum		Maximum		Black							
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.197	5,0	.039	1,0	.091	2,3	**H-2538**	FSS 2055-039	.551	14,0	.787	20,0	.945	24,0
.197	5,0	.031	0,8	.079	2,0	**H-2539**	FSS 2059-031	.591	15,0	1.102	28,0	1.181	30,0

Standard color black.



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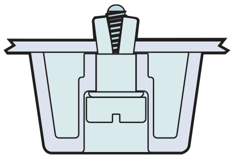

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CERTIFICATE # 08-511

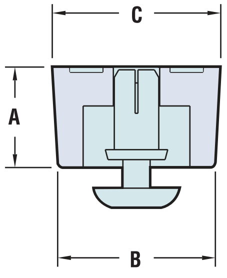
Heyco® Feets of Strength™

FSS–Feet with Push Rivet

PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS					
Mounting Hole Size		Thickness Range				Black		A Overall Height		B Top Diameter		C Bottom Diameter	
		Minimum		Maximum									
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.122	3,1	.031	0,8	.071	1,8	**H-2517**	FSR 1221-031	.217	5,5	.531	13,5	.559	14,2
.142	3,6	.039	1,0	.079	2,0	**H-2520**	FSR 1415-039	.157	4,0	.394	10,0	.425	10,8
.142	3,6	.079	2,0	.118	3,0	**H-2521**	FSR 1415-079	.157	4,0	.394	10,0	.425	10,8
.161	4,1	.031	0,8	.071	1,8	**H-2522**	FSR 1616-031	.165	4,2	.787	20,0	.827	21,0
.161	4,1	.071	1,8	.110	2,8	**H-2523**	FSR 1616-071	.165	4,2	.787	20,0	.827	21,0
.161	4,1	.075	1,9	.110	2,8	**H-2527**	FSR 1623-071	.236	6,0	.787	20,0	.827	21,0
.161	4,1	.114	2,9	.157	4,0	**H-2528**	FSR 1623-110	.236	6,0	.787	20,0	.827	21,0
.161	4,1	.083	2,1	.118	3,0	**H-2530**	FSR 1631-079	.315	8,0	.787	20,0	.827	21,0
.161	4,1	.039	1,0	.079	2,0	**H-2532**	FSR 1635-039	.354	9,0	.551	14,0	.591	15,0
.161	4,1	.079	2,0	.118	3,0	**H-2533**	FSR 1635-079	.354	9,0	.551	14,0	.591	15,0

Standard color black.

- Requires only fingertip pressure for fast, easy installation.
- May be released from inside the panel.
- Multiple sizes range in height from .217˝ (5,5 mm) to .354˝ (9,0 mm).
- Molded from ethylene vinyl acetate.



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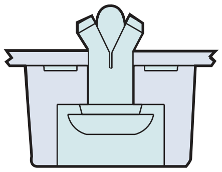


AFTER INSERTION

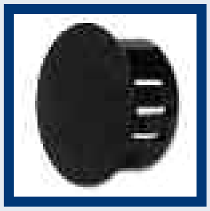
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Notes:

HOLE PLUGS

Dome Plugs
5-1

Thick Panel Dome Plugs
5-2



Halogen & Phosphorous-Free 94V-0 Hole Plugs
5-3

Metric Dome Plugs
5-4

Insulation Plugs
5-4

Shorty Plugs
5-5

Pry-Out Plugs
5-6

Vent Plugs
5-7

Thick Panel Vent Plugs
5-8

Glossy Plugs
5-9

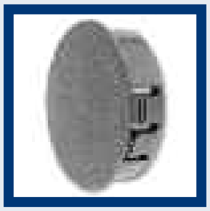
Thick Panel Glossy Plugs
5-10

Window Plugs
5-11

Specialty Window Plugs
5-12

Threaded Plugs, PG &Metric
5-13

Hole Plugs for Rectangular Lockit & RDD Holes
5-14



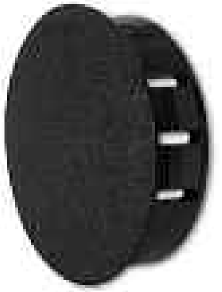
Knock-Out & Thick Panel Knock-Out Seals
5-15

Louvered Dome Plugs
5-16

Liquid Tight Hole Plugs
5-17

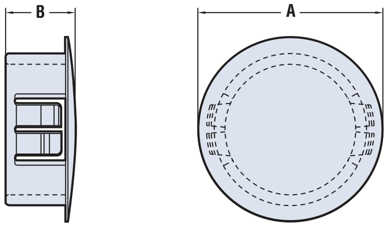
Nylon D-Subminiature Mounting Hole Plugs
5-18

ESTCO
Hole Plugs



Heyco® Dome Plugs

- Closes unneeded panel holes.
- Convex, matte finish head tapers to thin edge (Except DP-187).
- Multiple sizes for use in .187″ (4,7 mm) to 6.00″ (152,4 mm) diameter holes.
- Locks firmly into panel up to .250″ (6,4 mm) thick.
- Quick and easy installation.



PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.062	1,6	.187	4,7	*H-2590	*H-2591	** DP-187	.250	6,4	.234	5,9
.062	1,6	.250	6,4	H-2603	H-2604	**DP-250	.312	7,9	.312	7,9
.062	1,6	.312	7,9	H-2613	H-2614	**DP-312	.375	9,5	.312	7,9
.125	3,2	.375	9,5	H-2617	H-2618	DP-375	.468	11,9	.406	10,3
.125	3,2	.437	11,1	H-2633	H-2634	DP-437	.531	13,5	.406	10,3
.125	3,2	.500	12,7	H-2643	H-2644	DP-500	.578	14,7	.406	10,3
.125	3,2	.562	14,3	H-2653	H-2654	DP-562	.656	16,7	.406	10,3
.125	3,2	.625	15,9	H-2663	H-2664	DP-625	.718	18,2	.406	10,3
.125	3,2	.687	17,4	H-2673	H-2674	DP-687	.781	19,8	.406	10,3
.125	3,2	.750	19,1	H-2683	H-2684	DP-750	.921	23,4	.406	10,3
.125	3,2	.812	20,6	H-2693	H-2694	DP-812	.890	22,6	.406	10,3
.125	3,2	.875	22,2	H-2703	H-2704	DP-875	1.015	25,8	.453	11,5
.125	3,2	1.000	25,4	H-2713	H-2714	DP-1000	1.203	30,6	.453	11,5
.125	3,2	1.093 1.125	27,8 28,6	H-2723	H-2724	DP-1093	1.218	30,9	.453	11,5
.125	3,2	1.187	30,1	H-2733	H-2734	DP-1187	1.312	33,3	.453	11,5
.125	3,2	1.250	31,7	H-2740	H-2741	DP-1250	1.375	34,9	.453	11,5
.125	3,2	1.375	34,9	H-2753	H-2754	DP-1375	1.500	38,1	.453	11,5
.125	3,2	1.500	38,1	H-2763	H-2764	DP-1500	1.671	42,4	.453	11,5
.125	3,2	1.750	44,5	H-2773	H-2774	DP-1750	1.916	48,7	.453	11,5
.125	3,2	2.000	50,8	H-2783	H-2784	DP-2000	2.170	55,1	.469	11,9
.250	6,4	2.093- 2.125	53,2 54,0	H-2403	H-2404	DP-2.093	2.343	59,9	.760	19,3
.250	6,4	2.250	57,2	H-2411	H-2412	DP-2.25	2.479	63,0	.750	19,1
.250	6,4	2.500	63,5	H-2790	H-2791	DP-2.5	2.730	69,5	.750	19,1
.250	6,4	3.000	76,2	H-2455	H-2456	DP-3.0	3.171	80,5	.750	19,1
.250	6,4	3.375	85,7	H-2482	H-2483	DP-3.375	3.656	92,9	.750	19,1
.250	6,4	3.500	88,9	H-2464	H-2465	DP-3.5	3.656	92,9	.750	19,1
.250	6,4	4.000	101,6	H-2473	H-2474	DP-4.0	4.156	105,6	.750	19,1
.250	6,4	5.000	127,0	H-2451	H-2452	DP-5.0	5.219	132,5	.781	19,8
.250	6,4	6.000	152,4	H-2453	H-2454	DP-6.0	6.219	157,9	.781	19,8

Standard colors black or white. Consult ESTCO for other colors.
Locking fingers in fractional increments up to the maximum panel thickness.
*Convex, glossy finish head tapers to thin edge.
Approximate Head Thickness: .063″ (1,6mm). Thickness may vary.
**Depicts single locking finger design.

Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

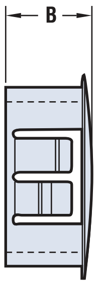
ISO 9001:2000 Certified
CERTIFICATE # 08-511

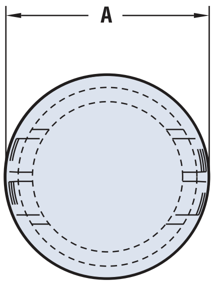
Heyco® Thick Panel Dome Plugs

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.250	6,4	.500	12,7	**H-3004**	**H-3005**	DPT-500	.578	14,7	.562	14,3
.250	6,4	.625	15,9	**H-3006***	**H-3007***	DPT-625	.718	18,2	.562	14,3
.250	6,4	.750	19,1	**H-3008***	**H-3009***	DPT-750	.921	23,4	.562	14,3
.250	6,4	.875	22,2	**H-3044**	**H-3045**	DPT-875	1.015	25,8	.562	14,3
.250	6,4	1.000	25,4	**H-3046**	**H-3047**	DPT-1000	1.203	30,6	.562	14,3
.250	6,4 6,4	1.093- 1.125	27,8- 28,6	**H-3018**	**H-3019**	DPT-1093	1.218	30,9	.562	14,3
.250	6,4	1.187	30,1	**H-3100**	**H-3101**	DPT-1187	1.312	33,3	.562	14,3
.250	6,4	1.250	31,7	**H-3102**	**H-3103**	DPT-1250	1.375	34,9	.562	14,3
.250	6,4	1.375	34,9	**H-3106**	**H-3107**	DPT-1375	1.500	38,1	.562	14,3
.250	6,4	1.500	38,1	**H-3048**	**H-3049**	DPT-1500	1.671	42,4	.562	14,3
.250	6,4	1.750	44,5	**H-3027**	**H-3028**	DPT-1750	1.906	48,4	.562	14,3
.250		2.000	50,8	**H-3050**	**H-3051**	DPT-2000	2.170	55,1	.580	14,7

Standard color black. Consult ESTCO for other colors.
Locking fingers in fractional increments up to the maximum panel thickness.
Approximate Head Thickness: .063˝ (1,6 mm). Thickness may vary.
*Depicts single panel design.

- Closes unneeded panel holes and electrical knock-outs.
- A convex, matte finish head that tapers to a thin edge.
- Locking fingers snap into holes with fingertip pressure for quick and easy installation.
- Withstands a push back force of 35 pounds.
- Available in multiple sizes for use in .500˝ (12,7 mm) to 2.00˝ (50,8 mm) diameter holes for panel thickness up to .250˝ (6,4 mm).





Material	**6/6 Nylon**
Certifications	**UR Recognized under the Component Program of Underwriters' Laboratories File E51579**
	SP Certified by the Canadian Standards Association File LR8919
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

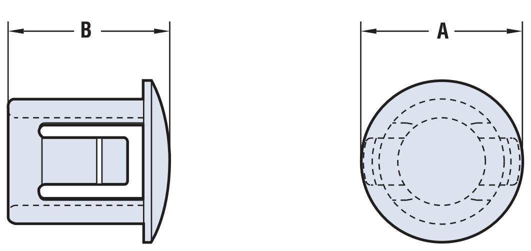
Heyco® Halogen and Phosphorous-Free 94V-0 Hole Plugs

Heat Stabilized! Self Extinguishing! Nontoxic! UV Resistant!

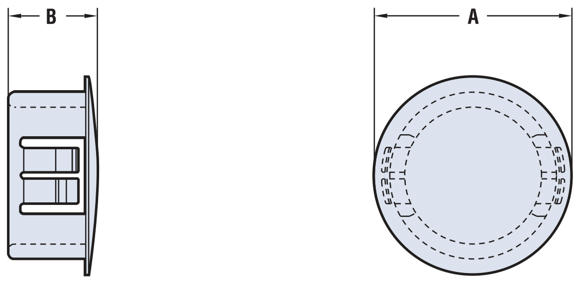
- Molded from a nylon material which, in the event of a fire, will not burn and will not produce toxic gases. Also formulated for sunlight resistance. Other Heyco products are available in this material–please consult Heyco.
- Closes unneeded panel holes.
- Convex, matte finish head tapers to a thin edge (Except HFP-187 glossy finish).
- Multiple sizes for use in .187″ (4,7 mm) to 2″ (50,8 mm) diameter holes. Consult Heyco for larger sizes.
- Locks firmly into panel up to .125″ (3,2 mm) thick.
- Quick and easy installation.

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter				A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.
.062	1,6	.187	4,7	**H-2593***	HFP-187	.265	6,7	.240	6,1
.062	1,6	.250	6,4	**H-2606***	HFP-250	.312	7,9	.312	7,9
.062	1,6	.312	7,9	**H-2616***	HFP-312	.375	9,5	.312	7,9
.125	3,2	.375	9,5	**H-2623**	HFP-375	.468	11,9	.406	10,3
.125	3,2	.437	11,1	**H-2636**	HFP-437	.531	13,5	.406	10,3
.125	3,2	.500	12,7	**H-2646**	HFP-500	.570	14,5	.406	10,3
.125	3,2	.625	15,9	**H-2666**	HFP-625	.734	18,6	.421	10,7
.125	3,2	.750	19,1	**H-2686**	HFP-750	.921	23,4	.406	10,3
.125	3,2	.875	22,2	**H-2706**	HFP-875	1.015	25,8	.453	11,5
.125	3,2	1.000	25,4	**H-2716**	HFP-1000	1.203	30,6	.453	11,5
.125	3,2	1.093 1.125	27,8 28,6	**H-2729**	HFP-1093	1.218	30,9	.453	11,5
.125	3,2	1.250	31,7	**H-2749**	HFP-1250	1.375	34,9	.453	11,5
.125	3,2	1.375	34,9	**H-2759**	HFP-1375	1.500	38,1	.453	11,5
.125	3,2	1.500	38,1	**H-2769**	HFP-1500	1.671	42,4	.453	11,5
.125	3,2	1.750	44,5	**H-2779**	HFP-1750	1.906	48,4	.453	11,5
.125	3,2	2.000	50,8	**H-2789**	HFP-2000	2.170	55,1	.469	11,9

Standard color black.
Locking fingers in fractional increments up to the maximum panel thickness.
*Depicts single panel thickness design.
Approximate Head Thickness: .063″ (1,6 mm).



SINGLE PANEL THICKNESS DESIGN*



MULTIPLE PANEL THICKNESS DESIGN

Quick Specs

Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E51579 Certified by the Canadian Standards Association File LR8919
Flammability Rating	94V-0
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

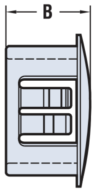
ISO 9001:2000 Certified
CERTIFICATE # 08-511

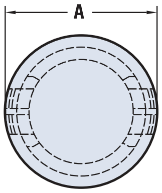
Heyco® Metric Dome Plugs

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter					A Head Diameter		B Overall Height	
in.	mm.	in.	mm.	Black	White		in.	mm.	in.	mm.
.098	2,5	.630	16,0	**H-2128**	**H-2130**	MDP 16	.728	18,5	.406	10,3
.098	2,5	.787	20,0	**H-2131**	**H-2132**	MDP 20	.890	22,6	.406	10,3
.098	2,5	.984	25,0	**H-2133**	**H-2134**	MDP 25	1.173	29,8	.453	11,5
.098	2,5	1.260	32,0	**H-2135**	**H-2136**	MDP 32	1.388	35,3	.453	11,5

Standard color black. Consult ESTCO for other colors.
Approximate Head Thickness: .063″ (1,6 mm).

- Closes unneeded panel holes.
- Convex, matte finish head tapers to a thin edge.
- Multiple sizes for use in .630″ (16,0 mm) to 1.260″ (32,0 mm) diameter holes. For other metric sizes, consult Heyco.
- Locks firmly into panel up to .098″ (2,5 mm) thick.
- Quick and easy installation.



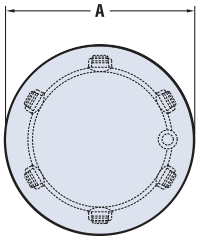


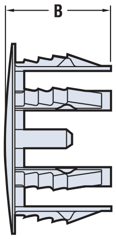
Heyco® Insulation Plug

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter					A Head Diameter		B Overall Height	
in.	mm.	in.	mm.	Black	White		in.	mm.	in.	mm.
No Max.		1.000	25,4	**H-3149**	**H-3150**	IPW 1	1.234	31,3	.687	17,5

Standard color black. Consult ESTCO for other colors.

- Fills holes in surfaces of unspecified thickness including cabinetry, furniture, display cases–even masonry.
- Closes cavity-fill insulation holes in wood and other type siding.
- Convex, matte finish head blends with various surfaces.
- Holds securely in hole.
- Quick and easy installation with fingertip pressure (no tool required).
- Molded of type 6/6 Nylon. Flammability classification 94V-2.
- Quick Specs below do not apply.





Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

Quick Specs

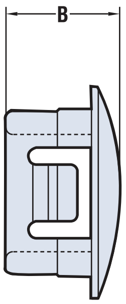
ISO 9001:2000 Certified
CERTIFICATE # 08-511

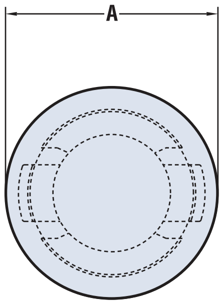
Heyco® Shorty Plugs

- • Limited intrusion (1/8″ or 3,2 mm) inside the panel.
- • Multiple sizes total for mounting holes from .218″ (5,5 mm) to 1.093″ (27,8 mm).
- • Locks firmly in panel up to .062″ (1,6 mm) thick.
- • Quick and easy installation.

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.062	1,6	.218	5,5	**H-1654**	**H-1655**	SP-218	.281	7,1	.25	6,4
.062	1,6	.281	7,1	**H-1660**	**H-1661**	SP-281	.343	8,7	.25	6,4
.062	1,6	.312	7,9	**H-1678**	**H-1679**	SP-312	.375	9,5	.25	6,4
.062	1,6	.343	8,7	**H-1663**	**H-1664**	SP-343	.406	10,3	.25	6,4
.062	1,6	.375	9,5	**H-1681**	**H-1682**	SP-375	.468	11,9	.25	6,4
.062	1,6	.406	10,3	**H-1666**	**H-1667**	SP-406	.468	11,9	.25	6,4
.062	1,6	.437	11,1	**H-1684**	**H-1685**	SP-437	.531	13,5	.25	6,4
.062	1,6	.468	11,9	**H-1669**	**H-1670**	SP-468	.531	13,5	.25	6,4
.062	1,6	.500	12,7	**H-1687**	**H-1688**	SP-500	.563	14,3	.25	6,4
.062	1,6	.531	13,5	**H-1672**	**H-1673**	SP-531	.593	15,1	.25	6,4
.062	1,6	.593	15,1	**H-1675**	**H-1676**	SP-593	.687	17,5	.25	6,4
.062	1,6	.625	15,9	**H-1690**	**H-1691**	SP-625	.718	18,3	.25	6,4
.062	1,6	.750	19,0	**H-1693**	**H-1694**	SP-750	.843	21,4	.25	6,4
.062	1,6	.781	19,8	**H-1696**	**H-1697**	SP-781	.890	22,6	.25	6,4
.062	1,6	.875	22,2	**H-1699**	**H-1700**	SP-875	.968	24,6	.25	6,4
.062	1,6	1.000	25,4	**H-1702**	**H-1703**	SP-1000	1.200	30,5	.25	6,4
.062	1,6	1.093	27,8	**H-1705**	**H-1706**	SP-1093	1.219	31,0	.25	6,4

Standard colors black and white. Consult ESTCO for other colors.
Approximate Head Thickness: .063″ (1,6 mm).





Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

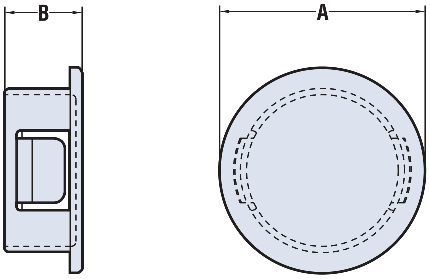
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Pry Out Plugs

PANEL DIMENSIONS Maximum Thickness in.	PANEL DIMENSIONS Maximum Thickness mm.	Mounting Hole Diameter in.	Mounting Hole Diameter mm.	PART NO. Black	PART NO. White	DESCRIPTION	PART DIMENSIONS A Head Diameter in.	A Head Diameter mm.	B Overall Height in.	B Overall Height mm.
.156	4,0	.250	6,4	**H-3053**	**H-3054**	POP-250	.421	10,7	.328	8,3
.172	4,4	.312	7,9	**H-3056**	**H-3057**	POP-312	.510	12,9	.406	10,3
.172	4,4	.375	9,5	**H-3059**	**H-3060**	POP-375	.578	14,7	.406	10,3
.172	4,4	.437	11,1	**H-3062**	**H-3063**	POP-437	.609	15,5	.406	10,3
.172	4,4	.500	12,7	**H-3065**	**H-3066**	POP-500	.671	17,0	.406	10,3
.172	4,4	.562	14,3	**H-3068**	**H-3069**	POP-562	.734	18,6	.406	10,3
.172	4,4	.625	15,9	**H-3071**	**H-3072**	POP-625	.796	20,2	.406	10,3
.172	4,4	.687	17,4	**H-3074**	**H-3075**	POP-687	.890	22,6	.406	10,3
.172	4,4	.750	19,0	**H-3077**	**H-3078**	POP-750	.968	24,6	.406	10,3
.172	4,4	.812	20,6	**H-3080**	**H-3081**	POP-812	1.031	26,2	.406	10,3
.172	4,4	.875	22,2	**H-3083**	**H-3084**	POP-875	1.078	27,4	.406	10,3
.172	4,4	1.000	25,4	**H-3086**	**H-3087**	POP-1000	1.218	30,9	.406	10,3
.172	4,4	1.093	27,8	**H-3089**	**H-3090**	POP-1093	1.296	32,9	.406	10,3
.172	4,4	1.187	30,1	**H-3092**	**H-3093**	POP-1187	1.406	35,7	.406	10,3
.172	4,4	1.250	31,8	**H-3095**	**H-3096**	POP-1250	1.453	36,9	.406	10,3
.172	4,4	1.375	34,9	**H-3098**	**H-3099**	POP-1375	1.578	40,1	.453	11,5
.250	6,4	1.500	38,1	**H-3124**	**H-3125**	POP-1500	1.718	43,6	.453	11,5
.250	6,4	1.750	44,5	**H-2973**	**H-2974**	POP-1750	1.980	50,3	.475	12,1
.250	6,4	2.000	50,8	**H-2798**	**H-2799**	POP-2000	2.218	56,4	.483	12,3
.250	6,4	2.500	63,5	**H-2975**	**H-2976**	POP-2.5	2.691	68,4	.741	18,8

Standard color black. Consult ESTCO for other colors.
Approximate Head Thickness: .063″ (1,6 mm).

- “POP” in closures for pipe and tubing ends.
- “POP” out removal for reusing the hole or for access.
- Bumper protection.
- Flat, matte finish head.
- Multiple sizes for use in .250″ (6,4 mm) to 2.00″ (50,8 mm) diameter holes for panel thickness up to .250″ (6,4 mm).



Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters’ Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

Quick Specs

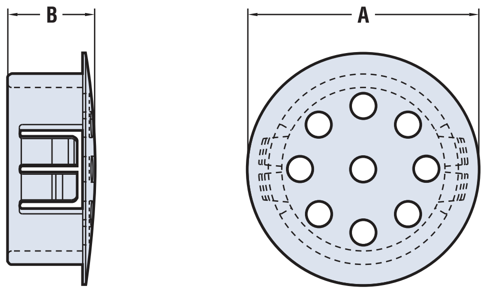
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Vent Plugs

- Permits the passage of air for ventilation and heat dissipation.
- Convex, matte finish head tapers to a thin edge.
- Multiple sizes for use in .500˝ (12,7 mm) to 4.00˝ (101,6 mm) diameter holes.
- VP-500 through VP-875 have 3/32˝ (2,4 mm) diameter vent holes. All other sizes have 1/8˝ (3,2 mm) diameter vents.
- Locks firmly into panel up to .250˝ (6,4 mm) thick.
- Quick and easy installation with only fingertip pressure.

PANEL DIMENSIONS				PART NO.		DESCRIPTION	No. of Vent Holes	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White			A Head Diameter		B Overall Height	
in.	mm.	in.	mm.					in.	mm.	in.	mm.
.125	3,2	.500	12,7	**H-2637**	**H-2638**	VP-500	4	.578	14,7	.406	10,3
.125	3,2	.625	15,8	**H-2657**	**H-2658**	VP-625	5	.734	18,7	.406	10,3
.125	3,2	.750	19,1	**H-2677**	**H-2678**	VP-750	8	.906	23,0	.406	10,3
.125	3,2	.812	20,6	**H-2688**	**H-2689**	VP-812	8	.890	22,6	.406	10,3
.125	3,2	.875	22,2	**H-2697**	**H-2698**	VP-875	9	1.015	25,8	.453	11,5
.125	3,2	1.000	25,4	**H-2707**	**H-2708**	VP-1000	9	1.203	30,6	.453	11,5
.125	3,2	1.093 1.125	27,8 28,6	**H-2726**	**H-2727**	VP-1093	9	1.218	30,9	.453	11,5
.125	3,2	1.187	30,2	**H-2736**	**H-2737**	VP-1187	10	1.312	33,3	.453	11,5
.125	3,2	1.250	31,8	**H-2743**	**H-2744**	VP-1250	10	1.375	34,9	.453	11,5
.125	3,2	1.250	31,8	**H-2797**	**—**	SVP-1250	4	1.375	34,9	.453	11,5
.125	3,2	1.375	34,9	**H-2756**	**H-2757**	VP-1375	11	1.500	38,1	.453	11,5
.125	3,2	1.500	38,1	**H-2766**	**H-2767**	VP-1500	13	1.671	42,4	.453	11,5
.125	3,2	1.750	44,5	**H-2776**	**H-2777**	VP-1750	13	1.906	48,4	.453	11,5
.125	3,2	2.000	50,8	**H-2786**	**H-2787**	VP-2000	19	2.140	54,4	.468	11,9
.250	6,4	2.500	63,5	**H-2793**	**H-2794**	VP-2.5	19	2.718	69,0	.750	19,1
.250	6,4	3.000	76,2	**H-2458**	**H-2459**	VP-3.0	26	3.171	80,5	.750	19,1
.250	6,4	3.500	88,9	**H-2467**	**H-2468**	VP-3.5	38	3.656	92,9	.750	19,1
.250	6,4	4.000	101,6	**H-2476**	**H-2477**	VP-4.0	48	4.156	105,6	.750	19,1

Standard colors black and white. Consult ESTCO for other colors.
Locking fingers in fractional increments up to the maximum chassis thickness.
Approximate Head Thickness: .063˝ (1,6 mm). Thickness may vary.



Quick Specs

Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

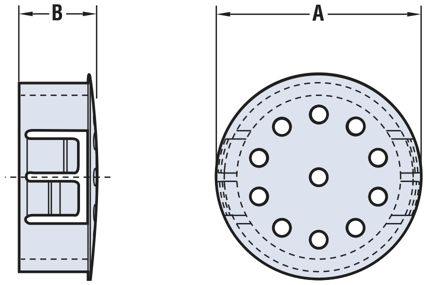
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Thick Panel Vent Plugs

PANEL DIMENSIONS				PART NO.		DESCRIPTION	No. of Vent Holes	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White			A Head Diameter		B Overall Height	
in.	mm.	in.	mm.					in.	mm.	in.	mm.
.250	6,4	.500	12,7	**H-3010**	**H-3011**	VPT-500	4	.578	14,7	.562	14,3
.250	6,4	.625	15,9	**H-3013***	**H-3014***	VPT-625	5	.734	18,7	.562	14,3
.250	6,4	.750	19,1	**H-2426***	**H-2427***	VPT-750	8	.906	23,0	.562	14,3
.250	6,4	.875	22,2	**H-3152**	**H-3153**	VPT-875	9	1.015	25,8	.562	14,3
.250	6,4	1.000	25,4	**H-3154**	**H-3155**	VPT-1000	9	1.203	30,6	.562	14,3
.250	6,4	1.093- 1.125	27,8- 28,6	**H-3032**	**H-3033**	VPT-1093	9	1.218	30,9	.562	14,3
.250	6,4	1.187	30,2	**H-3160**	**H-3161**	VPT-1187	10	1.31	33,3	.562	14,3
.250	6,4	1.250	31,7	**H-3034**	**H-3035**	VPT-1250	10	1.375	34,9	.562	14,3
.250	6,4	1.375	34,9	**H-3036**	**H-3037**	VPT-1375	11	1.500	38,1	.562	14,3
.250	6,4	1.500	38,1	**H-3156**	**H-3157**	VPT-1500	13	1.671	42,4	.562	14,3
.250	6,4	1.750	44,5	**H-3038**	**H-3039**	VPT-1750	13	1.906	48,4	.562	14,3
.250	6,4	2.000	50,8	**H-3158**	**H-3159**	VPT-2000	19	2.140	54,4	.579	14,7

- Convex, matte finish head that tapers to a thin edge.
- Permits the passage of air for ventilation and heat dissipation.
- Locking fingers snap into holes with fingertip pressure for quick and easy installation.
- Withstands a push back force of 35 pounds.
- Available in multiple sizes for use in .500″ (12,7 mm) to 2.00″ (50,8 mm) diameter holes for panel thickness up to .250″ (6,4 mm).

Standard colors black and white. Consult ESTCO for other colors.
Locking fingers in fractional increments up to the maximum chassis thickness.
Approximate Head Thickness: .063″ (1,6 mm). Thickness may vary.



Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

Quick Specs

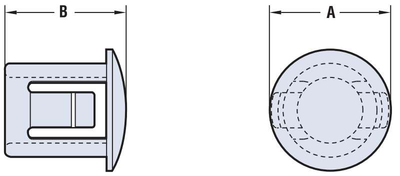
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Glossy Plugs

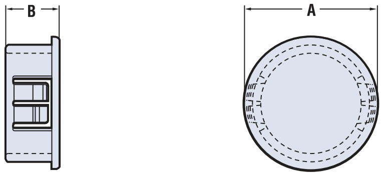
- Closes unneeded panel openings.
- Smooth, glossy head provides easy glide and shiny finish.
- Multiple sizes for use in .187″ (4,7 mm) to 2.00″ (50,8 mm) diameter holes.
- Locks firmly in panel up to .125″ (3,2 mm) thick.
- Quick and easy installation.

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.062	1,6	.187	4,7	**H-2590***	**H-2591***	DP-187**	.250	6,4	.234	5,9
.062	1,6	.250	6,4	**H-2600***	**H-2601***	G-250	.312	7,9	.312	7,9
.062	1,6	.312	7,9	**H-2610***	**H-2611***	G-312	.375	9,5	.312	7,9
.125	3,2	.375	9,5	**H-2620**	**H-2621**	G-375	.468	11,9	.406	10,3
.125	3,2	.437	11,1	**H-2630**	**H-2631**	G-437	.531	13,5	.406	10,3
.125	3,2	.500	12,7	**H-2640**	**H-2641**	G-500	.563	14,3	.406	10,3
.125	3,2	.562	14,3	**H-2650**	**H-2651**	G-562	.656	16,7	.406	10,3
.125	3,2	.625	15,9	**H-2660**	**H-2661**	G-625	.734	18,6	.406	10,3
.125	3,2	.750	19,1	**H-2680**	**H-2681**	G-750	.859	21,8	.406	10,3
.125	3,2	.875	22,2	**H-2700**	**H-2701**	G-875	.953	24,2	.453	11,5
.125	3,2	1.000	25,4	**H-2710**	**H-2711**	G-1000	1.125	28,6	.453	11,5
.125	3,2	1.093 1.125	27,8 28,6	**H-2720**	**H-2721**	G-1093	1.218	30,9	.453	11,5
.125	3,2	1.187	30,1	**H-2730**	**H-2731**	G-1187	1.312	33,3	.453	11,5
.125	3,2	1.375	34,9	**H-2760**	**H-2761**	G-1375	1.486	37,7	.455	11,3
.125	3,2	1.500	38,1	**H-2770**	**H-2771**	G-1500	1.609	40,8	.455	11,3
.125	3,2	1.750	44,4	**H-2780**	**H-2781**	G-1750	1.875	47,6	.453	11,5
.125	3,2	2.000	50,8	**H-2795**	**H-2796**	G-2000	2.127	54,0	.455	11,3

Standard colors black and white. Consult ESTCO for other colors.
Locking fingers in fractional increments up to the maximum panel thickness.
*Depicts single panel thickness design.
**Domed glossy finished head tapers to a thin edge.



SINGLE PANEL THICKNESS DESIGN*



MULTIPLE PANEL THICKNESS DESIGN

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

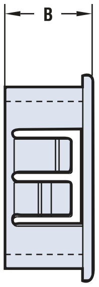
Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E51579 Certified by the Canadian Standards Association File LR8919
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

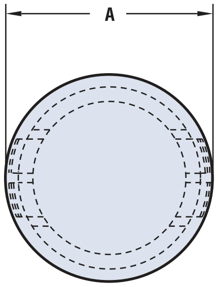
Heyco® Thick Panel Glossy Plugs

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.250	6,4	.500	12,7	**H-2430**	**H-2431**	GPT-500	.563	14,3	.562	14,3
.250	6,4	.625	15,9	**H-3134***	**H-3135***	GPT-625	.734	18,6	.562	14,3
.250	6,4	.750	19,1	**H-3136***	**H-3137***	GPT-750	.859	21,8	.562	14,3
.250	6,4	.875	22,2	**H-3138**	**H-3139**	GPT-875	.953	24,2	.562	14,3
.250	6,4	1.000	25,4	**H-3140**	**H-3141**	GPT-1000	1.125	28,6	.562	14,3
.250	6,4	1.093- 1.125	27,8- 28,6	**H-3142**	**H-3143**	GPT-1093	1.218	30,9	.562	14,3
.250	6,4	1.187	30,2	**H-3144**	**H-3145**	GPT-1187	1.312	33,3	.562	14,3
.250	6,4	1.375	34,9	**H-2432**	**H-2433**	GPT-1375	1.468	37,3	.562	14,3
.250	6,4	1.500	38,1	**H-2428**	**H-2429**	GPT-1500	1.620	41,2	.562	14,3
.250	6,4	1.750	44,5	**H-2436**	**H-2437**	GPT-1750	1.875	47,6	.562	14,3
.250	6,4	2.000	50,8	**H-2438**	**H-2439**	GPT-2000	2.157	54,8	.562	14,3

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to the maximum panel thickness.
*Depicts single panel thickness design.

- Closes unneeded panel holes and electrical knock-outs.
- Smooth, glossy head provides easy glide finish to the head.
- Locking fingers snap into holes with fingertip pressure for quick and easy installation.
- Withstands a push back force of 35 pounds.
- Available in multiple sizes for use in 1/2″ (12,7 mm) to 2″ (50,8 mm) diameter holes.





Material	**6/6 Nylon**
Certifications	**Recognized under the Component Program of Underwriters' Laboratories File E51579** **Certified by the Canadian Standards Association File LR8919**
Flammability Rating	**94V-2**
Material Temperature Index	**257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)**

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

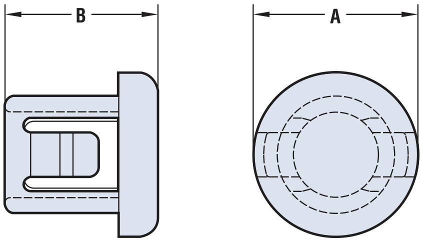
Heyco® Window Plugs

- Molded of transparent polycarbonate for internal viewing or light transmission.
- Multiple sizes for use in .187″ (4,7 mm) to 2.00″ (50,8 mm) diameter holes.
- Locks firmly into panel up to .125″ (3,2 mm) thick.
- Snaps into mounting holes with fingertip pressure–no tools required.
- Available in a variety of tints besides clear–consult ESTCO.

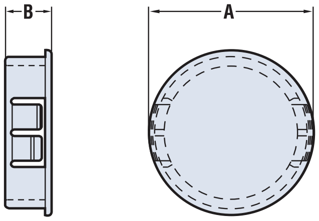
Consult ESTCO for window tints other than clear.

PANEL DIMENSIONS				PART NO.	DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter				A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.
.062	1,6	.187	4,7	***H-1300**	WP-187	.250	6,4	.234	5,9
.062	1,6	.250	6,4	***H-1301**	WP-250	.312	7,9	.312	7,9
.062	1,6	.312	7,9	***H-1302**	WP-312	.375	9,5	.312	7,9
.125	3,2	.375	9,5	**H-1303**	WP-375	.468	11,9	.406	10,3
.125	3,2	.437	11,1	**H-1304**	WP-437	.531	13,5	.406	10,3
.125	3,2	.500	12,7	**H-1305**	WP-500	.563	14,3	.406	10,3
.125	3,2	.625	15,9	**H-1307**	WP-625	.734	18,6	.406	10,3
.125	3,2	.750	19,1	**H-1309**	WP-750	.859	21,8	.406	10,3
.125	3,2	.875	22,2	**H-1311**	WP-875	.953	24,2	.453	11,5
.125	3,2	1.000	25,4	**H-1312**	WP-1000	1.125	28,6	.453	11,5
.125	3,2	1.093-1.1251	27,8-28,6	**H-1313**	WP-1093	1.218	30,9	.453	11,5
.125		.375	34,9	**H-1314**	WP-1375	1.500	38,1	.453	11,5
.125	3,2	1.500	38,1	**H-1316**	WP-1500	1.620	41,4	.453	11,5
.125	3,2	1.750	44,4	**H-1318**	WP-1750	1.875	47,6	.453	11,5
.125	3,2	2.000	50,8	**H-1319**	WP-2000	2.157	54,8	.453	11,5

Locking fingers in fractional increments up to the maximum panel thickness.
*Depicts single panel design.



SINGLE PANEL THICKNESS DESIGN*



MULTIPLE PANEL THICKNESS DESIGN

Quick Specs

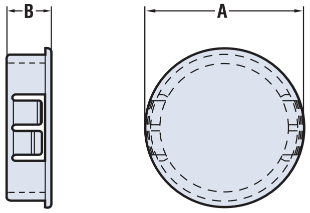
Material	**Polycarbonate**
Flammability Rating	**94V-2**
Material Temperature Index	**275°F (135°C)–Maximum temperature on part not to exceed 239°F (115°C)**

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Specialty Window Plugs

PANEL DIMENSIONS Maximum Thickness in.	mm.	Mounting Hole Diameter in.	mm.	PART NO.	DESCRIPTION	PART DIMENSIONS A Head Diameter in.	mm.	B Overall Height in.	mm.
.062	1,6	.500	12,7	**H-1292**	SWP-500	.563	14,3	.406	10,3
.062	1,6	.625	15,9	**H-1293**	SWP-625	.734	18,6	.406	10,3
.062	1,6	.750	19,1	**H-1294**	SWP-750	.859	21,8	.406	10,3
.062	1,6	.875	22,2	**H-1295**	SWP-875	.953	24,2	.453	11,5
.062	1,6	1.000	25,4	**H-1296**	SWP-1000	1.125	28,6	.453	11,5

Locking fingers in fractional increments up to the maximum panel thickness.
*Depicts single panel design.



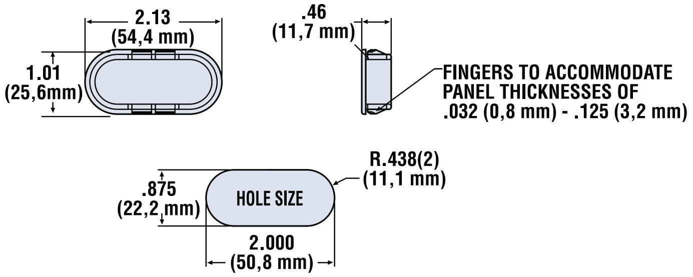
- • Molded of transparent polycarbonate for internal viewing or light transmission.
- • Multiple sizes for use in .500″ (12,7 mm) to 2″ (50,8 mm) diameter holes.
- • Locks firmly into panel up to .062″ (1,6 mm) thick.
- • Snaps into mounting holes with fingertip pressure–no tools required.
- • Flammability Rating 94V-2.
- • Available in a variety of tints besides clear–consult ESTCO.

Consult ESTCO for window tints other than clear.

Heyco® Oval Window Plugs

PANEL DIMENSIONS Maximum Thickness in.	mm.	Mounting Hole Diameter in.	mm.	PART NO.	DESCRIPTION	PART DIMENSIONS A Head Diameter in.	mm.	B Overall Height in.	mm.
.125	3,2	2.000	50,8	**H-1299**	OWP-875-2000	2.13	54,4	.460	11,7

Locking fingers in fractional increments up to the maximum panel thickness.



Material	Polycarbonate
Flammability Rating	94V-2
Material Temperature Index	275°F (135°C)–Maximum temperature on part not to exceed 239°F (115°C)

Quick Specs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® PG Threaded Plugs

- Molded of shock resistant polystyrol and PG plugs are molded of Nylon 6/6.
- Working temperature range: -4°F (-20°C) to 176°F (80°C).
- Protection Class IP 50.
- Color is light gray Ral 7035.

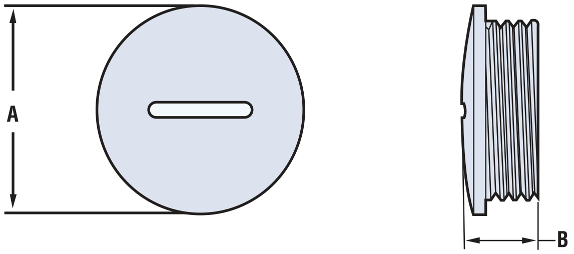
THREAD TYPE AND SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A Head Dia.		B Overall Height	
			in.	mm.	in.	mm.
PG 7	**H-3405**	TP-PG7	.59	15,0	.32	8,0
PG 9	**H-3407**	TP-PG9	.75	19,0	.37	9,5
PG 11	**H-3402**	TP-PG11	.87	22,0	.39	10,0
PG 13	**H-3412**	TP-PG13	.98	25,0	.39	10,0
PG 16	**H-3414**	TP-PG16	1.06	27,0	.39	10,0
PG 21	**H-3416**	TP-PG21	1.30	33,0	.47	12,0
PG 29	**H-3418**	TP-PG29	1.73	44,0	.47	11,5
PG 36	**H-3415**	TP-PG36	2.17	55,0	.55	14,0
PG 48	**H-3417**	TP-PG48	2.72	69,0	.63	16,0

Standard color gray. Consult Heyco for black and other colors.

Heyco® Metric Threaded Plugs

THREAD TYPE AND SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A Head Dia.		B Overall Height	
			in.	mm.	in.	mm.
M12 x 1,5	**H-3403**	TP-M12	.59	15,0	.41	10,5
M16 x 1,5	**H-3404**	TP-M16	.79	20,0	.41	10,5
M20 x 1,5	**H-3406**	TP-M20	.95	24,0	.41	10,5
M25 x 1,5	**H-3408**	TP-M25	1.18	30,0	.51	13,0
M32 x 1,5	**H-3409**	TP-M32	1.48	37,0	.53	13,5
M40 x 1,5	**H-3410**	TP-M40	1.81	46,0	.55	14,0
M50 x 1,5	**H-3411**	TP-M50	2.17	55,0	.63	16,0
M63 x 1,5	**H-3413**	TP-M63	2.76	70,0	.71	18,0

Standard color gray. Consult Heyco for black and other colors.



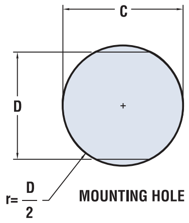
ISO 9001:2000 Certified
CERTIFICATE # 08-511

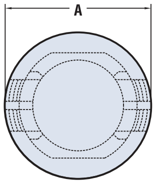
Heyco® Hole Plugs for RDD Holes & Rectangular Lockit

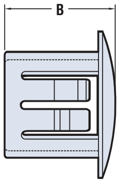
- Closes unwanted strain relief mounting holes or other double faced or Double "D" holes punched or molded with two opposing flats.
- Convex, matte finish head tapers to a thin edge.
- Locks firmly in panels up to .125˝ (3,2 mm) thick.
- Quick and easy installation.

PANEL DIMENSIONS						PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		C Mounting Hole Diameter		D To Prevent Rotation		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.	in.	mm.				in.	mm.	in.	mm.
.125	3,2	.437	11,1	.390	9,9	**H-2488**	**H-2489**	DD-437-390	.531	13,5	.406	10,3
.125	3,2	.500	12,7	.445	11,3	**H-2491**	**H-2492**	DD-500-445	.554	14,7	.406	10,3
.125	3,2	.562	14,3	.530	13,5	**H-2494**	**H-2495**	DD-562-530	.656	16,7	.406	10,3
.125	3,2	.625	15,9	.550	14,0	**H-2497**	**H-2498**	DD-625-550	.718	18,2	.406	10,3
.125	3,2	.750	19,1	.625	15,9	**H-2503**	**H-2504**	DD-750-625	.921	23,4	.406	10,3
.125	3,2	.875	22,2	.770	19,5	**H-2509**	**H-2510**	DD-875-770	1.016	25,8	.453	11,5

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to the maximum panel thickness.
Approximate Head Thickness: .063˝ (1,6 mm). Thickness may vary.



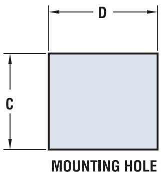


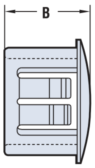


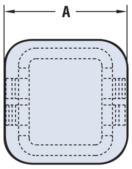
Heyco® Rectangular Plugs

PANEL DIMENSIONS						PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		C Mounting Hole Diameter		D To Prevent Rotation		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.	in.	mm.				in.	mm.	in.	mm.
.099	2,5	.512	13,0	.453	11,5	**H-1890**	**H-1891**	RP-115-130	.580	14,7	.403	10,2
.157	4,0	.690	17,5	.690	17,5	**H-1892**		RP-175-175	.830	21,1	.467	11,9

Standard color black. Consult ESTCO for white and other colors.







Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E51579 Certified by the Canadian Standards Association File LR8919
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

Quick Specs

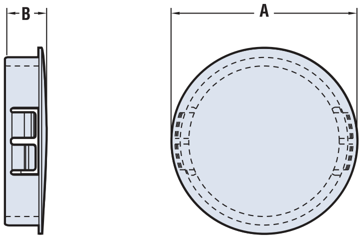
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Knock-Out Seals

- Plugs electrical knock-outs.
- Molded in gray color to resemble galvanized steel.
- Multiple trade sizes fit 1/2˝ to 2˝ knock-out holes.
- Locks firmly in boxes up to 1/8˝ thick, except for KOS2 and KOSTs which lock firmly in boxes up to 1/4˝ thick.
- Installs quickly with fingertip pressure (no tool required).
- Economical.

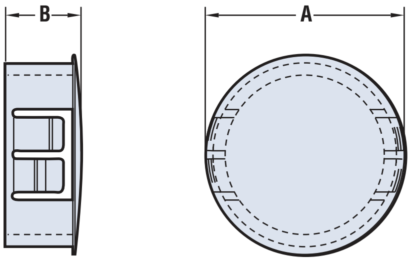
PANEL DIMENSIONS				TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter			Silver Gray		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.125	3,2	.875	22,2	1/2	**H-3997**	KOS 1/2	1.015	25,8	.453	11,5
.125	3,2	1.093	27,8	3/4	**H-3998**	KOS 3/4	1.218	31,0	.453	11,5
.125	3,2	1.375	34,9	1	**H-3999**	KOS 1	1.500	38,1	.453	11,5
.125	3,2	1.750	44,5	1-1/4	**H-4000**	KOS 1-1/4	1.906	48,4	.453	11,5
.125	3,2	2.000	50,8	1-1/2	**H-4001**	KOS 1-1/2	2.140	54,4	.453	11,5
.250	6,4	2.500	63,5	2	**H-4002**	KOS 2	2.730	69,3	.750	19,1

Standard color silver gray. Locking fingers in fractional increments up to the maximum panel thickness. Approximate Head Thickness: .063˝ (1,6 mm). Thickness may vary.



Heyco® Thick Panel Knock-Out Seals

PANEL DIMENSIONS				TRADE SIZE	PART NO.	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter			Silver Gray	A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.	mm.	in.	mm.
.250	6,4	.875	22,2	KOST 1/2	**H-3991**	1.015	25,8	.562	14,3
.250	6,4	1.093	27,8	KOST 3/4	**H-3992**	1.218	31,0	.562	14,3
.250	6,4	1.375	34,9	KOST 1	**H-3993**	1.500	38,1	.562	14,3
.250	6,4	1.750	44,5	KOST 1-1/4	**H-3994**	1.906	48,4	.562	14,3
.250	6,4	2.000	50,8	KOST 1-1/2	**H-3995**	2.140	54,4	.579	14,7
.250	6,4	2.500	63,5	KOS 2	**H-4002**	2.730	69,3	.750	19,1



Standard color silver gray. Locking fingers in fractional increments up to the maximum panel thickness. Approximate Head Thickness: .063˝ (1,6 mm). Thickness may vary.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

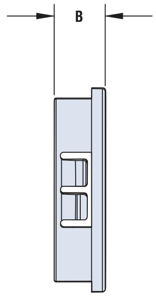
Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E51579 Certified by the Canadian Standards Association File LR8919
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

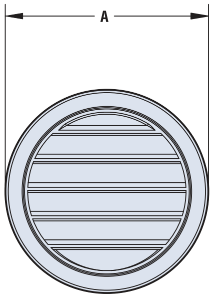
Heyco® Louvered Plugs

PANEL DIMENSIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Maximum Thickness		Mounting Hole Diameter		Black	White		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
.125	3,2	.875	22,2	**H-2557**	**H-2558**	LP 875	1.015	25,8	.531	13,5
.125	3,2	1.000	25,4	**H-2559**	**H-2560**	LP 1000	1.205	30,6	.531	13,5
.125	3,2	1.093	27,8	**H-2561**	**H-2562**	LP1093	1.218	30,9	.531	13,5
.125	3,2	1.125	28,6							
.125	3,2	1.375	34,9	**H-2567**	**H-2568**	LP 1375	1.500	38,1	.543	13,8
.125	3,2	1.500	38,1	**H-2569**	**H-2570**	LP 1500	1.676	42,6	.543	13,8
.125	3,2	2.000	50,8	**H-2594**	**H-2595**	LP 2000	2.170	55,1	.543	13,8
.250	6,4	2.500	63,5	**H-2596**	**H-2597**	LP 2.5	2.718	69,0	.823	20,9

Standard color black. Consult ESTCO for white and other colors.
Locking fingers in fractional increments up to the maximum panel thickness.

- Louvers permit the passage of air for ventilation but limits liquid infiltration.
- Locks firmly into panel up to .250˝ (6,4 mm) thick.
- Quick and easy installation.
- Suitable for ventilation in electronic enclosures, motor housings and metal or plastic panels.
- Withstands a push back force of 35 lbs.





Material	6/6 Nylon
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

Quick Specs

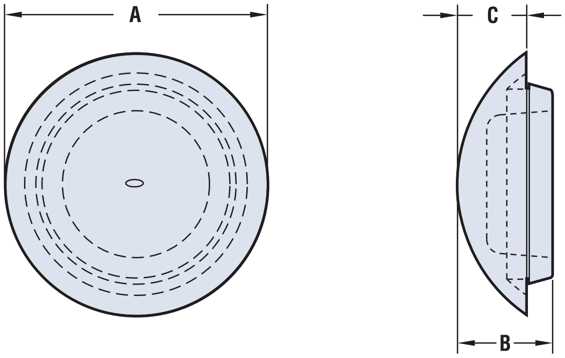
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Heyco® Liquid Tight Hole Plugs

- V0 Flammability rating.
- Oil tight, rain tight, submersible.
- UL certified for UV and outdoor applications
- Three trade sizes fit 1/2″ to 1″ knock-out holes.
- Multiple nominal sizes fit .500″ to 1.00″ “true size” mounting holes.
- Locks firmly in boxes from .030″ (0,8 mm) to .125″ (3,2 mm) thick.
- Installs with fingertip pressure (no tool required).
- Trade sizes are UL listed under Underwriters’ Laboratories File E51579 and certified by Canadian Standard Association File LR081067C.
- True sizes are UR recognized under Underwriters’ Laboratories File E51579 and SP certified by Canadian Standard Association File LR008919C.

PANEL DIMENSIONS				PART NO.	DESCRIPTION or Trade Size	PART DIMENSIONS					
Mounting Hole Diameter		Maximum Thickness		Black		A Head Dia.		B Overall Height		C Head Thickness	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.125	3,2	.500	12,7	**H-3830**	KOS-LT 500	.910	23,1	.450	11,4	.290	7,4
.125	3,2	.625	15,9	**H-3834**	KOS-LT 625	1.030	26,2	.470	11,9	.310	7,9
.125	3,2	.750	19,1	**H-3831**	KOS-LT 750	1.150	29,2	.510	13,0	.350	8,9
.125	3,2	.875	22,2	**H-3833**	KOS-LT	1.281	32,5	.530	13,5	.360	9,1
.125	3,2	1.000	25,4	**H-3832**	1/2KOS-LT 1000	1.410	35,8	.560	14,2	.400	10,2
.125	3,2	1.093	27,8	**H-3835**	KOS-LT	1.520	38,6	.550	14,0	.400	10,2
.125	3,2	1.375	34,9	**H-3837**	3/4KOS-LT 1	1.780	45,2	.562	14,3	.421	10,7

Standard color black.



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Quick Specs

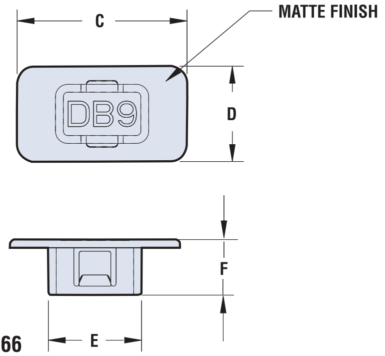
Material	Santoprene™
Flammability Rating	94V-0

Heyco® Nylon D-Subminiature Mounting Hole Plugs

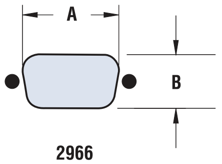
PANEL DIMENSIONS						PART NO.	DESCRIPTION	PART DIMENSIONS							
Maximum Thickness		Mounting Hole Diameter						Head				Body			
		A		B		Black		C		D		E		F	
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.
.17	4,3	.81	20,6	.450	11,4	**H-2966**	POP-DB9	1.25	31,8	.70	17,8	.69	17,5	.41	10,4
.17	4,3	1.13	28,8	.450	11,4	**H-2968**	POP-DB15	1.57	39,8	.70	17,8	1.05	26,7	.41	10,4
.17	4,3	1.67	42,5	.450	11,4	**H-2970**	POP-DB25	2.12	51,0	.70	17,8	1.55	39,4	.41	10,4
.17	4,3	2.32	59,1	.450	11,4	**H-2972**	POP-DB37	2.77	70,4	.70	17,8	2.23	56,6	.41	10,4

Standard color black.

- Covers unwanted holes in panel and is easily removable.
- Protection from dust particles.
- Provides aesthetic improvement for
- unused D-subminiature connector mounting holes.
- Fits standard D-Subminiature Cutouts for 9,15, 25 and 37 pin connectors.
- Suitable for use as dust protection for unused parallel and serial ports on computers and other electrical equipment.
- Quick and easy installation with fingertip pressure.



2966



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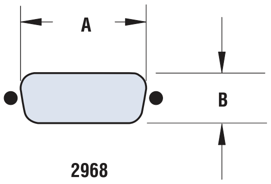
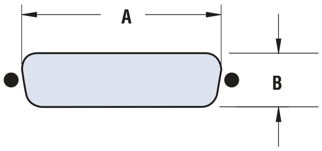
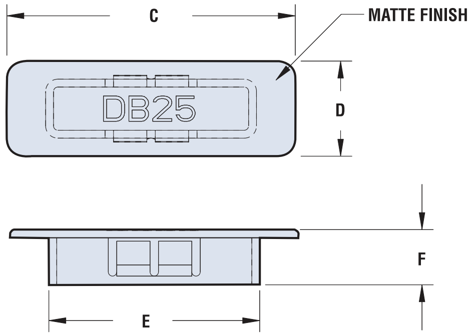


2968

Custom Color Match and Special Engraved Indentification Available. Consult ESTCO for Details



2970



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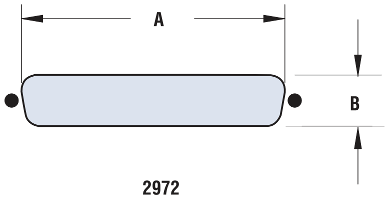


2972

Material	6/6 Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E51579 Certified by the Canadian Standards Association File pending
Flammability Rating	94V-2
Material Temperature Index	257°F (125°C)–Maximum temperature on part not to exceed 221°F (105°C)

Quick Specs

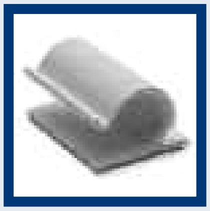
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Notes:

WIRE POSITIONING

Nylon Cable Clamps

Nylon Hose Clamps and Nylon Strap Mates


"J" & "C" Style Wire Clips

Cable Wrap

Cable Clamps, Push & Snap Lock

Wire and Cable Holders

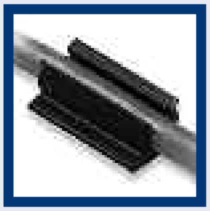
Cable Ties

Lockit Hose Clamps

"P" Style Wire and Cable Holder & Lockit Loops

Nylon Rivets, Arrow Clips & Push-in Fasteners

Push Mount Wire Clips

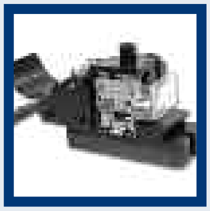

"U" Style Wire Clips

CONTACT ESTCO FOR MORE PRODUCT INFORMATION

ESTCO
Wire Positioning

Notes:

POWER COMPONENTS

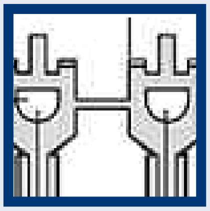

Application Equipment

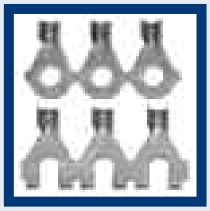
Turn-2-Lock Cord and Plug Sets

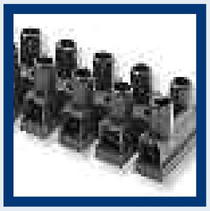
Preassembled Cordset Components

Aluminum Solderless and Copper Lug Connectors

Male Bridge Preassembled Cordset Components


Quick Connect Terminals


Ring and Spade Terminals


Standard Appliance Terminal Blocks

ERTB Terminal Blocks

Preassembled Cordset Components Tri-Tap Premold

Turn-2-Lock Cordset Components

OEM Wire & HighTemp Wire Connectors

CONTACT ESTCO FOR MORE PRODUCT INFORMATION

ESTCO
Power Components

Notes:

SEAL MASTER and PLUG MASTER

Seal In / Seal Out Washers
8-1

Plug Master- Fastening, Sealing, Cushioning System
8-2

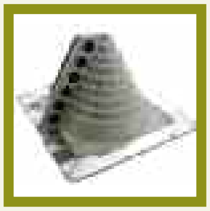
FLASH MASTER

20 YEAR WARRANTY

Standard Flash Master
8-4

Universal Flash Master
8-5

Multi-Flash Flash Master
8-6



Standard Retrofit Flash Master
8-7

Universal Retrofit Flash Master
8-8

Square Vent Flash Master
8-9

Residential Flash Master
8-10

Res-Lead Flash Master
8-11

Master-Cap Flash Master
8-12

Solar-Flash Flash Master
8-13

Mini Standard Flash Master
8-13

Multi-Port Flash Master
8-14

NEW 35 YEAR Flash Master
8-15

ESTCO
Seal Master, Plug Master, Flash Master

Seal Master

“Washers are More than just Washers”

- Quality elastomeric compounding to meet specifications for elasticity, memory, temperature extremes, chemical-, ozone-, and sunlight-resistance.
- Conical design directs flow of facing materials to form a seal conforming to both fastener and sealing surface.
- Full-face design cushions fragile surfaces and minimizes vibration.
- Inside diameter sizes for #4 diameter screw to 1 1/2" diameter bolts and corresponding metric range.
- Outside diameter sizes from 1/4" to 3" and corresponding metric range.
- Choice of an infinite number of backing materials.
- Choice of various colors and finishes available.
- Choice of various facing materials.

SCREW & BOLT SIZE		BACKING INNER DIAMETER		OUTER DIAMETER																												
mm	U.S. Standard	mm	Decimal	6.3mm	9.5mm	11mm	12mm	13mm	14mm	14mm	15mm	16mm	17.5mm	18.3mm	19mm	20mm	22mm	25mm	28mm	30mm	32mm	35mm	38mm	41.3mm	44.5mm	47.6mm	51mm	57mm	65.5mm	70mm	76mm	Millimtr
				1/4″	3/8″	7/16″	15/32″	1/2″	35/64″	9/16″	19/32″	5/8″	11/16″	23/32″	3/4″	25/32″	7/8″	1″	1-1/8″	1-3/16	1-1/4″	1-3/8″	1-1/2″	1-5/8	1-3/4″	1-7/8″	2″	2-1/4″	2-1/2″	2-3/4″	3″	Inches
2.9	#4	3.3	.120	●	●	▼	▼	x	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
3.5	#6	3.8	.150	●	●	▼	▼	x	▼	▼	▼	x	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
4.2	#8	4.6	.180		●	●	●	●	▼	▼	▼	●	▼	x	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
4.8	#10	5.1	.200		●	●	●	●	●	x	●	●	▼	●	●	▼	●	●	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	x	
5.5	#12	6.1	.230* .240		●* x	●* x	●* x	●* x	●	●	●	●	▼	●	●	▼	●	●	●	●	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
6.3	#14	7.0	.260* .275					●* x	●	●	●	●	▼	●	●	▼	●	●	●	●	●	▼	●	▼	▼	▼	▼	▼	▼	▼	▼	
7.5	#17	7.7	.305								●	●	▼	●	●	▼	●	●	●	●	●	▼	●	▼	▼	▼	▼	▼	▼	▼	▼	
8.0	5/16″	8.4	.330 .360*								x	●	▼	●* x	●	▼	●	●	●	●	●	▼	●	▼	▼	▼	▼	▼	▼	▼	▼	
9.5	3/8″	11.0	.410* .434										▼	●* x	●	▼	●	●	●	●	●	●	●	▼	▼	▼	▼	▼	▼	▼	▼	
11.1	7/16″	12.1	.475											x	●	▼	●	●	●	●	●	▼	●	▼	▼	▼	▼	▼	▼	▼	▼	
12.7	1/2″	13.5	.532														x	●	●	●	●	▼	●	●	▼	▼	●	▼	▼	▼	▼	
14.0	9/16″	15.2	.600																x	●	x	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
15.9	5/8″	16.5	.650																x	●	x	▼	●	x	▼	▼	▼	▼	▼	▼	▼	
17.5	11/16″	18.8	.720																	x	x	▼	x	▼	▼	▼	▼	▼	▼	▼	▼	
19.0	3.4″	20.6	.810																				●	▼	▼	▼	▼	▼	▼	▼	▼	
22.2	7/8″	23.1	.910																				●	▼	▼	▼	▼	▼	▼	▼	▼	
25.4	1″	26.4	1.050																					▼	▼	▼	●	▼	▼	▼	▼	
27.0	1-1/16	28.0	1.100																					▼	▼	▼	▼	▼	▼	▼	▼	
28.6	1-1/8″	29.6	1.150																						▼	▼	▼	▼	▼	▼	▼	
30.2	1-3/16	31.0	1.220																						▼	▼	▼	▼	▼	▼	▼	
31.8	1-1/4″	32.8	1.275																								▼	▼	▼	▼	▼	
40.0	1-9/16	40.6	1.6																									x		x	x	

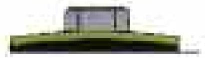
* Only available from stock with this inside diameter.

We suggest standard sizes for economy and availability

● **STANDARD OUTSIDE DIAMETERS**
▼ **SPECIAL ORDER: TOOLING CHARGE AND/OR MINIMUM ORDER REQUIRED**
x **NONSTANDARD ITEM: MINIMUM ORDER REQUIRED (TOOLING AVAILABLE)**

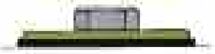
BACKING MATERIALS:

- Galvanized Steel
- Aluminum
- Stainless Steel
- 316 Stainless Steel



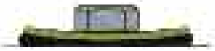
INSUFFICIENT TIGHTENING

Likely to cause leakage under seal and around fastener.



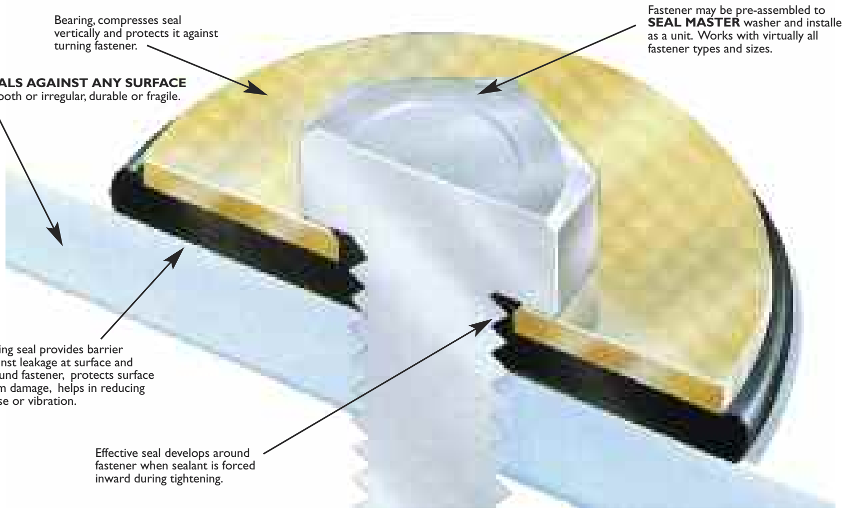
CORRECT INSTALLATION

Tight against surface. Seal flows inward to seal minor fastener diameter and surface voids.



EXCESSIVE TORQUE

Causes reverse dishing. Leakage under seal possible.



Bearing, compresses seal vertically and protects it against turning fastener.

Fastener may be pre-assembled to **SEAL MASTER** washer and installed as a unit. Works with virtually all fastener types and sizes.

SEALS AGAINST ANY SURFACE
Smooth or irregular, durable or fragile.

Facing seal provides barrier against leakage at surface and around fastener, protects surface from damage, helps in reducing noise or vibration.

Effective seal develops around fastener when sealant is forced inward during tightening.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plug Master

Threaded Insert - Fastening, Sealing, Cushioning System.

PLUG MASTER SIZE CHART

DESCRIPTION		GRIP RANGE		BODY DIAMETER		OVERALL LENGTH		FLANGE O.D		FLANGE THICKNESS		TORQUE	TENSILE
U.S.	METRIC	MIN	MAX	U.S.	METRIC	U.S.	METRIC	U.S.	METRIC	U.S.	METRIC	(In-lbs)	Pull Out
6-32 S	M3S	0.015	0.187	0.250	6.3mm	0.562	14mm	0.485	12.1mm	0.062	1.6mm	3.0	110.0
6-32 L	M3L	0.312	0.625	0.250	6.3	1.095	27.8	0.485	12.1	0.062	1.6	4.0	110.0
6-32 PDI	M3PDI	0.062	0.087	0.312	8	0.562	14	0.485	12.1	0.062	1.6	5.0	450.0
8-32 S	M4S	0.062	0.087	0.312	8	0.562	14	0.485	12.1	0.062	1.6	3.0	120.0
8-32 L	M4L	0.375	0.875	0.312	8	1.312	33	0.550	13.9	0.062	1.6	5.0	110.0
10-32 S	M5S	0.066	0.202	0.375	9.5	0.680	16	0.550	14	0.080	1.6	6.0	300.0
10-32 F	M5F	0.093	0.375	0.375	9.5	0.865	22	0.550	13.9	0.040	1.0	5.0	350.0
10-32 L	M5L	0.750	1.062	0.375	9.5	1.590	40	0.605	15.4	0.090	2.3	10.0	800.0
1/4-20 S	M6S	0.062	0.312	0.490	12.5	0.845	21	0.800	20.3	0.095	2.4	10.0	575.0
1/4-20 SX	M6SX	0.031	0.187	0.490	12.5	0.845	21	0.720	18.3	0.185	4.7	10.0	225.0
1/4-20 SXX	M6SXX	0.093	0.375	0.490	12.5	0.845	21	0.610	15.5	0.050	1.3	15.0	875.0
1/4-20 J	M6J	0.125	0.450	0.490	12.5	1.062	27	0.610	15.5	0.050	1.3	15.0	1250.0
1/4-20 JX	M6JX	0.125	0.450	0.490	12.5	1.260	32	0.735	18.7	0.240	6.1	15.0	200.0
1/4-20 R	M6R	0.375	0.625	0.490	12.5	1.275	32.4	0.835	21.2	0.100	2.5	10.0	425.0
1/4-20 L	M6L	0.375	0.750	0.490	12.5	1.850	47	0.970	24.6	0.110	2.8	20.0	950.0
5/16-18 S	M8S	0.024	0.150	0.610	15.5	0.840	21	0.970	24.6	0.110	2.8	25.0	775.0
5/16-18 R	M8R	0.250	0.750	0.610	15.5	1.625	41	1.200	30.5	0.125	3.2	15.0	425.0
3/8-16 S	M10S	0.024	0.437	0.740	18.8	1.062	27	1.220	31	0.125	3.2	30.0	1125.0
3/8-16 SX	M10SX	0.032	0.406	0.740	18.8	1.062	27	1.205	30.6	0.190	4.8	20.0	475.0

ADAPTABILITY...

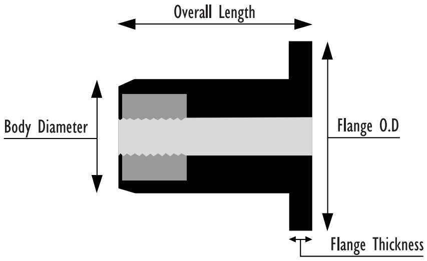
- Fastens blind holes and closed-end holesCushions and seals similar and non-similar materials
- Absorbs vibration and seals both sides
- Tapered design enhances fastening installation
- Won't crack with ozone and ultra violet exposure

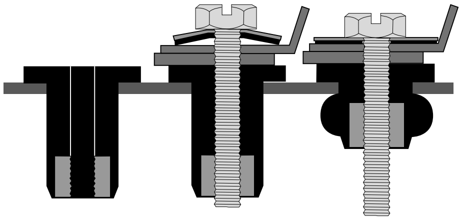
VERSATILITY...

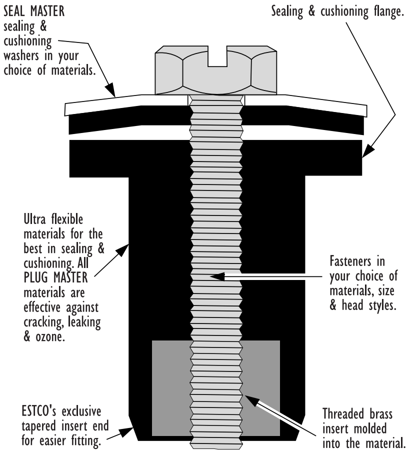
- Removable and re-insertable
- Installs with conventional tools
- Works as a system with SEAL MASTER washers
- Flange thickness always in proportion to size
- Grip range covers all dimensions.

AVAILABILITY...

- Almost any color
- 12 Standard sizes and 6 fastener diameters
- EPDM. Custom materials may be available, please consult ESTCO.


Overall Length
Body Diameter
Flange O.D
Flange Thickness




SEAL MASTER sealing & cushioning washers in your choice of materials.
Sealing & cushioning flange.
Ultra flexible materials for the best in sealing & cushioning. All PLUG MASTER materials are effective against cracking, leaking & ozone.
Fasteners in your choice of materials, size & head styles.
ESTCO's exclusive tapered insert end for easier fitting.
Threaded brass insert molded into the material.

More Seal Master and Plug Master Information...

SEAL IN... OR SEAL OUT
When installed in a sealing application, the materials in **ESTCO's SEAL MASTER** washer compress against either a flexible or an inflexible surface to permanently seal in or seal out any operating environment, whether natural or industrial. Facing materials are engineered to provide optimal resistance to weathering from ozone, ultraviolet light and/or chemical agents.

ESTCO can perform to your specifications or our experienced engineers can assist you in developing a specification for your application.

ESTCO's unique **SEAL MASTER** products are designed to provide a permanent seal in a wide variety of applications, including:
- Metal roofs and siding where the expansion and contraction of metal require a permanent resilient seal.
- Dishwashers - to avoid leaks.
- Marine - structural and electronic.
- Air filters - dust control.
- Automotive - air cleaner assemblies, engine block heater, emission control equipment, body sealing.

Other useful applications include:
- Small and large appliances, such as vacuum cleaners and refrigerators.
- Heating ventilation/air conditioning (HVAC) equipment.
- Silos and tanks for liquids and solids.
- Exhaust systems.
- Panels and enclosures.
- Environmentally controlled areas.

CUSHIONING AND VIBRATION CONTROL
Twenty-five years of proven experience in testing and retesting compounded formulas have led to the perfection of **ESTCO's SEAL MASTER** washers. Our washers possess extraordinary elasticity and memory when used in cushioning and vibration control applications.

As the washer is compressed and fastened against a substrate, the facing material serves as a permanent cushion. This feature protects the substrate from installation damage (spinning fastener and/ or torque) and from vibration damage during the product's life cycle.

When utilized for cushioning, **SEAL MASTER** washers are especially effective on glass, plastic, fiberglass, porcelain and painted surfaces. The cushioning meffect eliminates crazing, chipping and marring.

SEAL MASTER washers solve a variety of problems in numerous applications, including:
- Archery - protects sensitive compound bow sights.
- Motorcycles - protects fairings and components.
- Noise Control - electro-mechanical automotive devices and motor mounts for spray paint and other equipment
- Fragile surfaces - where crazing, cracking and chipping are problems.

Other applications include:
- Glass and mirror installations. Architectural panels.

SILICON-BRONZE, COPPER, COR-TEN® and other special property metals are available for use in specific industrial applications and for aesthetics in architectural exposures.

NON-METALLIC backings, from phenolics to plastics, have been used in electronic and other environments where metals cannot be used.

FACING MATERIALS
ESTCO offers a variety of facing materials to address thedistinctly different operating environments to which **SEAL MASTER** washers are exposed.

EPDM (Ethylene Propylene Diane Terpolymer) is an excellent, low-cost, ozone and weather resistant elastomer which possesses superior aging characteristics. It is also extremely effective when application requirements dictate heat resistance up to 350°F. Although use of EPDM in direct contact with petrochemicals is not recommended for construction applications where the primary hazards are ozone, ultraviolet radiation and temperature extremes, EPDM is the consistent elastomer of choice.

NEOPRENE® (Polychloroprene), one of the earliest, and perhaps best known of the manmade elastomers, is still one of the most versatile facing materials for sealing and cushioning washers. When properly formulated, it is highly resistant to sunlight, ozone, weathering and aging, while enjoying good memory and elasticity. Although its particular strength lies in its resistance to petrochemicals and certain other chemical families, Neoprene is a generalist - performing well in a myriad of applications. When direct contact with petrochemicals is of greater concern than direct U. V., Neoprene will do the job.

SILICONE elastomers address the next tier of sealing washer applications. Temperature extremes from -115°F TO +480°F, exposures to specific chemical environments, or repeated sterilization cycles make Silicone the most economical, high-performance choice.

FLUOROSILICONES, VITONS, etc.
ESTCO works with the most current elastomeric compounds for today's most demanding rubber seal applications. These higher-cost exotics are intended to address only the most demanding and specific application criteria.

NON-ELASTOMERIC facings include asbestos substitutes, cork, fiber and malleable metals, each useful in select applications.

As each new application requires a specific combination of performance and cost factors, we cannot list specifications for all uses. Our applications engineers and chemists are prepared to discuss your requirements and to deliver years of experience, just for the asking!

Standard Flash Master

ISO Quality, Price & Availability

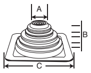
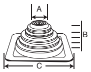
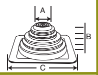
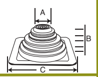
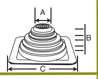
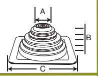
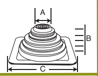
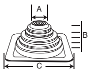
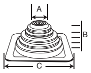
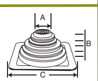
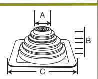
TWO COMPOUNDS/ 11 SIZES & 10 COLORS

"Available in two compounds to handle virtually all job applications"

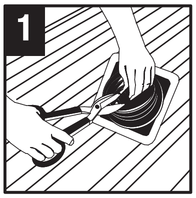
20 YEAR WARRANTY

	EPDM	SILICONE
ADVANCED OZONE RESISTANCE tested to...	70 hour @ 500 pphm	70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE Tested to Intermittent Continuous	+135°C (+275°F) +100°C (+212°F)	+260°C (+500°F) +225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...	– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum	1OMPa (1450 psi)	5 MPa (700 psi)
COMPRESSION SET maximum...	25%	50%

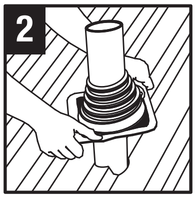
*Complete specification data and testing methods are available upon request.

	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
Mini	1/8"– 3/4" (3.2mm - 19.1 mm)	BLACK EPDM	FM-SQ051BA		A-Top opening diameter	1/16" (1.6mm)
					B-Cut to suit pipe size	1/8" – 3/4" (3.2-19.1mm)
					C-Base dimensions	2 - 1/4" (57.2mm)
#1	1/4"- 2-3/4" (6.4mm - 70mm)	BLACK EPDM	FM-SQ101BA		A-Top opening diameter	Closed
		GREY EPDM	FM-SQ101GA		B-Cut to suit pipe size	1/4" – 2-3/4" (6.4 -70mm)
		SILICONE	FM-SQ102RA		C-Base dimensions	4-1/2" (114.3mm)
#2	7/8"- 4" (22mm - 101.5mm)	BLACK EPDM	FM-SQ201BA		A-Top opening diameter	7/8" (22.2mm)
		GREY EPDM	FM-SQ201GA		B-Cut to suit pipe size	7/8" - 4" (25 - 101.5mm)
		SILICONE	FM-SQ202RA		C-Base dimensions	6" (152.4mm)
#3	1/4" - 5-3/4" (6.3mm - 146mm)	BLACK EPDM	FM-SQ301BA		A-Top opening diameter	Closed
		GREY EPDM	FM-SQ301GA		B-Cut to suit pipe size	1/4" – 5-3/4" (6.3 -146mm)
		SILICONE	FM-SQ302RA		C-Base dimensions	8" (203.2mm)
#4	2-3/4" - 7" (70mm - 177.8mm)	BLACK EPDM	FM-SQ401BA		A-Top opening diameter	2-3/4" (70mm)
		GREY EPDM	FM-SQ401GA		B-Cut to suit pipe size	2-3/4"– 7" (70 -177.8mm)
		SILICONE	FM-SQ402RA		C-Base dimensions	10" (254mm)
#5	4" - 8-1/4" (102mm - 209.5mm)	BLACK EPDM	FM-SQ501BA		A-Top opening diameter	4" (102mm)
		GREY EPDM	FM-SQ501GA		B-Cut to suit pipe size	4" – 8-1/4" (102 - 209.5mm)
		SILICONE	FM-SQ502RA		C-Base dimensions	11" (279.4mm)
#6	4-3/4" - 10" (121mm - 254mm)	BLACK EPDM	FM-SQ601BA		A-Top opening diameter	4-3/4" (121mm)
		GREY EPDM	FM-SQ601GA		B-Cut to suit pipe size	4-3/4" – 10" (121- 254mm)
		SILICONE	FM-SQ602RA		C-Base dimensions	12" (304.8mm)
#7	5-1/2" - 11-1/2" (140mm -292mm)	BLACK EPDM	FM-SQ701BA		A-Top opening diameter	5-1/2" (140mm)
		GREY EPDM	FM-SQ701GA		B-Cut to suit pipe size	5-1/2" – 11-1/2" (140- 292mm)
		SILICONE	FM-SQ702RA		C-Base dimensions	14" (355.6mm)
#8	6-3/4" - 13-1/2" (171.4mm - 343mm)	BLACK EPDM	FM-SQ801BA		A-Top opening diameter	6-3/4" (171.4mm)
		GREY EPDM	FM-SQ801GA		B-Cut to suit pipe size	6-3/4" – 13-1/2" (171.4 - 343mm)
		SILICONE	FM-SQ802RA		C-Base dimensions	17" (431.8mm)
#9	9-1/2" - 20-1/2" (241mm - 520mm)	BLACK EPDM	FM-SQ901BA		A-Top opening diameter	9-1/2" (241mm)
		GREY EPDM	FM-SQ901GA		B-Cut to suit pipe size	9-1/2" – 20-1/2" (241-520mm)
		SILICONE	FM-SQ902RA		C-Base dimensions	25" (635mm)
Maxi	12" - 28-1/2" (305mm - 724mm)	BLACK EPDM	FM-SQ951BA		A-Top opening diameter	12" (304mm)
		GREY EPDM	FM-SQ951GA		B-Cut to suit pipe size	12" – 28-1/2" (304 - 724mm)
		SILICONE	FM-SQ952RA		C-Base dimensions	34" (863.6mm)

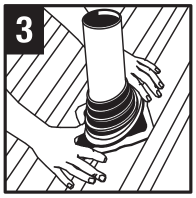
TERRA COTTA
BLACK
DARK BLUE
BROWN
WHITE
GREY
LIGHT GREEN
BRIGHT RED
LIGHT BLUE
DARK GREEN



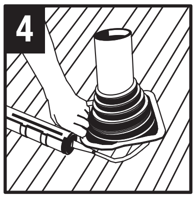
Choose Pipe Opening
and Trim



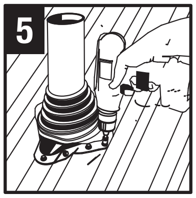
Slide Over Pipe



Form to Roof Profile



Apply Sealant



Fasten to Complete

- **Weather Protection**
  Made of E.P.D.M. or these flashings are compounded specifically for maximum resistance to weathering due to ozone and Silicone, ultraviolet light.
- **Easy On-Site Customization**
  Fast, one piece construction allows for easy on-site installation in usually 5 minutes.
- **Base Flexibility**
  The base is designed to form a seal on most panel configurations and roof pitches regardless of pipe location.
- **Design Excellence**
  ESTCO's flexible design meets all roofing needs. Sleeve flexibility accommodates vibration and pipe movement caused by expansion contraction. The soft aluminum base easily conforms to most metal roof profiles.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Universal Flash Master

ISO Quality, Price & Availability

TWO COMPOUNDS/ 9 SIZES & 10 COLORS

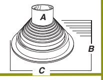
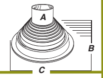
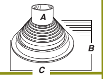
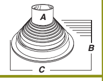
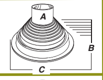
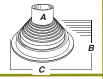
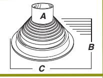
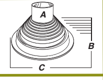
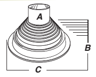
“Available in two compounds to handle virtually all job applications”

20 YEAR WARRANTY

ADVANCED OZONE RESISTANCE tested to...	EPDM 70 hour @ 500 pphm	SILICONE 70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE		
Tested to Intermittent	+135°C (+275°F)	+260°C (+500°F)
Continuous	+100°C (+212°F)	+225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...	– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum	1OMPa (1450 psi)	5 MPa (700 psi)
COMPRESSION SET maximum...	25%	50%

*Complete specification data and testing methods are available upon request.

SIZING CHART
Check diameter of pipe. Select the appropriate Universal Flash Master for pipe or duct diameter. For extreme pitch or surface irregularity select next larger size. Choose the compound required, then refer to the part number for the Universal FlashMaster desired.

	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
#1	1/4” - 2-1/2” (6.35 - 63.5mm)	BLACK EPDM	FM-RD101BE		A-Top Opening Diameter	Closed
		GREY EPDM	FM-RD101GG		B- Overall Height	2.77" (70.4mm)
		SILICONE	FM-RD101RG		C-Base Diameter	4.75" (120.7mm)
#2	1-3/4” - 3” (44.5 - 76.2mm)	BLACK EPDM	FM-RD201BE		A-Top Opening Diameter	1.44” (36.6mm)
		GREY EPDM	FM-RD201GG		B- Overall Height	3.53" (89.7mm)
		SILICONE	FM-RD201RG		C-Base Diameter	6.21" (157.7mm)
#3	1/4” - 5” (6.35 - 127mm)	BLACK EPDM	FM-RD301BE		A-Top Opening Diameter	Closed
		GREY EPDM	FM-RD301GG		B- Overall Height	3.64" (92.5mm)
		SILICONE	FM-RD301RG		C-Base Diameter	7.74" (196.6mm)
#4	3” -6-1/4” (76.2 - 158.8mm)	BLACK EPDM	FM-RD401BE		A-Top Opening Diameter	2.38" (60.5mm)
		GREY EPDM	FM-RD401GG		B- Overall Height	5.05" (128.3mm)
		SILICONE	FM-RD401RG		C-Base Diameter	9.26" (235.2mm)
#5	4-1/4” - 7-3/4” (108 - 196.9mm)	BLACK EPDM	FM-RD501BE		A-Top Opening Diameter	3.50” (88.9mm)
		GREY EPDM	FM-RD501GG		B- Overall Height	4.43" (112.5mm)
		SILICONE	FM-RD501RG		C-Base Diameter	10.75" (273.1mm)
#6	5” - 9” (127 - 228.6mm)	BLACK EPDM	FM-RD601BE		A-Top Opening Diameter	4.25" (108mm)
		GREY EPDM	FM-RD601GG		B- Overall Height	5.60" (142.2mm)
		SILICONE	FM-RD601RG		C-Base Diameter	12.50" (317.5mm)
#7	6” - 11” (152.4 - 279.4mm)	BLACK EPDM	FM-RD701BE		A-Top Opening Diameter	4.90" (124.5mm)
		GREY EPDM	FM-RD701GG		B- Overall Height	5.84" (148.3mm)
		SILICONE	FM-RD701RG		C-Base Diameter	14.60" (370.8mm)
#8	7” - 13” (177.8 - 330.2mm)	BLACK EPDM	FM-RD801BE		A-Top Opening Diameter	5.80" (147.3mm)
		GREY EPDM	FM-RD801GG		B- Overall Height	7.53" (191.3mm)
		SILICONE	FM-RD801RG		C-Base Diameter	16.5" (419.1mm)
#9	9” - 19” (228.6 - 482.6mm)	BLACK EPDM	FM-MFR9B		A-Top Opening Diameter	7.45" (189.2mm)
		GREY EPDM	FM-MFR9G		B- Overall Height	8.09" (205.5mm)
		SILICONE	FM-MFR9S		C-Base Diameter	25.25" (641.4mm)

BRIGHT RED
GREY
LIGHT BLUE
TERRA COTTA
DARK BLUE
BLACK
DARK GREEN
WHITE
LIGHT GREEN
BROWN

- **Ozone and UV Protection**
  Flashings are made of E.P.D.M and Silicone, and are designed for maximum resistance to all weather conditions.
- **On-Site Customization**
  Pipe diameters can be seen clearly for proper fitting.
- **Adaptable Base**
  The base is designed to mold to most panel configurations and roof pitches regardless of pipe location.
- **All Around Design Excellence**
  This universal flashing has been designed to fit virtually all panel configurations. Sleeve flexibility absorbs vibration and pipe movement caused by expansion/contraction. Easy on-site customization can accommodate all normal installations.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

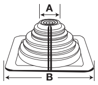
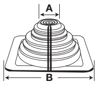
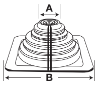
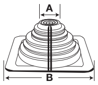
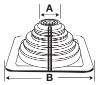
Multi-Flash Flash Master

“Two Flashings In One”

20 YEAR WARRANTY

ADVANCED OZONE RESISTANCE tested to...	EPDM 70 hour @ 500 pphm	SILICONE 70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE		
Tested to Intermittent	+135°C (+275°F)	+260°C (+500°F)
Continuous	+100°C (+212°F)	+225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...	– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum	1OMPa (1450 psi)	5 MPa (700 psi)
COMPRESSION SET maximum...	25%	50%

*Complete specification data and testing methods are available upon request.

	PIPE SIZE	COMPOUND	PART NO.		FLASHING DETAILS	
#1	STANDARD 1/4”– 2-3/4” (6 mm to 70 mm) RETROFIT 1-1/4”– 2-1/4” (25 mm to 57 mm)	BLACK EPD	**FM-MF101BA**		A - Top opening diameter	CLOSED
		RED SILICONE	**FM-MF102RA**		B - Base dimensions	4-1/2”
#3	STANDARD 1/4”– 5-3/4” (6 mm to 146 mm) RETROFIT 2”– 4-1/2” (50.8 mm to 114 mm)	BLACK EPD	**FM-MF301BA**		A - Top opening diameter	CLOSED
		RED SILICONE	**FM-MF302RA**		B - Base dimensions	8”
#5	STANDARD 4”– 8-1/4” (102 mm to 209 mm) RETROFIT 3-1/2”– 6-3/4” (88.9 mm to 171.4 mm)	BLACK EPDM	**FM-MF501BA**		A - Top opening diameter	3-1/2”
		RED SILICONE	**FM-MF502RA**		B - Base dimensions	11”
#8	STANDARD 6-3/4”– 13-1/2” (171 mm to 342 mm) RETROFIT 6-1/2”– 12” (165.1 mm to 304 mm)	BLACK EPDM	**FM-MF801BA**		A - Top opening diameter	6”
		RED SILICONE	**FM-MF802RA**		B - Base dimensions	17”
Maxi	STANDARD 12”– 28-1/2” (304 mm to 724 mm) RETROFIT 13”– 27” (330.2 mm to 685 mm)	BLACK EPDM	**FM-MF951BA**		A - Top opening diameter	11”
		RED SILICONE	**FM-MF802RA**		B - Base dimensions	34”

- **Weather Protection**
  Made of E.P.D.M. or these flashings are compounded specifically for maximum resistance to weathering due to ozone and Silicone, ultraviolet light.
- **A “C12” ASTM**
  Additional requirement was added to assure conformance to the most stringent ozone/weathering specifications available.
- **Base Flexibility**
  The base is designed to form a seal on most panel configurations and roof pitches regardless of pipe location.
- **EASY ON SITE CUSTOMIZING**
  Smooth cut is intended to eliminate use of razor blades. Stainless steel gripper to secure a retro custom fit. (GRIPPER SOLD SEPARATELY.)

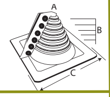
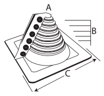
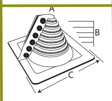
ISO 9001:2000 Certified
CERTIFICATE # 08-511

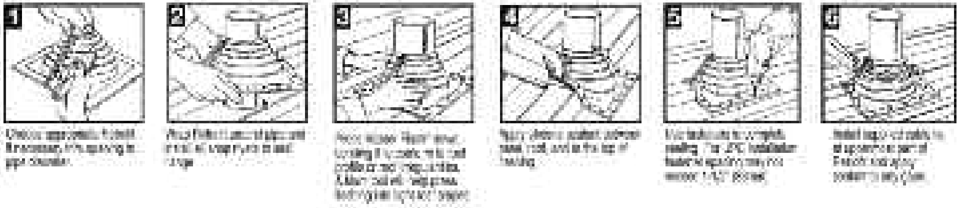
Standard Retrofit Flash Master

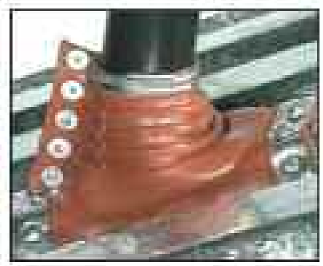
Two Compounds / 3 Sizes

20 YEAR WARRANTY

- **Weather Resistance**
  Designed to withstand the damaging effects of ultra violet light and ozone.
- **Modification Made Simple**
  Easy to see pipe diameters make for painless on site customization.
- **Malleable Base**
  Designed to conform to most panel configurations and roof pitches regardless of pipe location.
- Easily Installed Fastener Snaps Included.

	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
#1	1/2" - 4" (12.7 - 101.6mm)	BLACK EPDM GREY EPDM SILICONE	**FM-RF101BP** **FM-RF101GP** **FM-RF102RS**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	1/2" (12.7mm) 1/2" - 4" (12.7 -101.6mm) 8-3/16" (81mm)
#2	4" - 9-1/4" (101.6 - 135mm)	BLACK EPDM GREY EPDM SILICONE	**FM-RF201BP** **FM-RF201GP** **FM-RF202RS**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	4" (101.6mm) 4" - 9-1/4" (101.6 - 235mm) 14-1/4" (362mm)
#3	9-¼" - 16-¼" (235 - 412.8mm)	BLACK EPDM GREY EPDM SILICONE	**FM-RF301BP** **FM-RF301GP** **FM-RF302RS**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	9-1/4" (235 - 412.7mm) 9-1/4" x 16-1/4" (235 - 412.7mm) 21-1/2" (546.1mm)



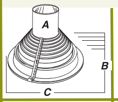
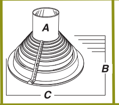
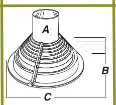


ISO 9001:2000 Certified
CERTIFICATE # 08-511

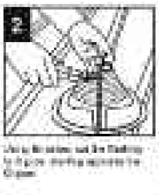
Universal Retrofit Flash Master

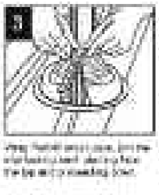
ISO Quality, Price & Availability
Two Compounds / 3 Sizes

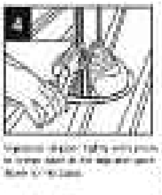
20 YEAR WARRANTY

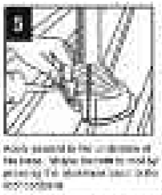
	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
#1	3/4” - 2-3/4” (19 - 69mm)	BLACK EPDM GREY EPDM SILICONE	**FM-RF101BS-RD** **FM-RF101GS-RD** **FM-RF102RS-RD**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	3/4”(19.1mm) 3/4” - 2-3/4” (19 - 69mm) 6 - 3/10” (160mm)
#2	2” - 7-1/4” (50.8 - 184mm)	BLACK EPDM GREY EPDM SILICONE	**FM-RF201BS-RD** **FM-RF201GS-RD** **FM-RF202RS-RD**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	2” (50.8mm) 2”- 7-1/4” (50.8 - 184mm) 10-3/4” (273mm)
#3	3-1/4” - 10” (95 - 254mm)	BLACK EPDM GREY EPDM SILICONE	**FM-RF301BS-RD** **FM-RF301GS-RD** **FM-RF302RS-RD**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	3-1/4 - 10” (50.8mm) 1/4” - 5” (82.5 - 253.9mm) 14-1/2” (368mm)

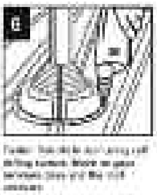
Step 1: For retrofit installation, cut center rubber at base of the stainless joiner and pull apart.

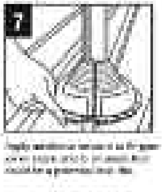












- **Weather Protection**
  Made of E.P.D.M. or Silicone,
  These flashings are compounded specifically for maximum resistance to weathering due to ozone and ultraviolet light.

- **Easy On-Site Customization**
  Fast, one piece construction allows for easy on-site install in usually 5 minutes.

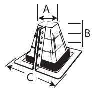
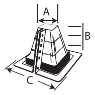
- **Flexible Base**
  Easily forms to contours of roof panel.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Square Vent Flash Master

20
YEAR
WARRANTY

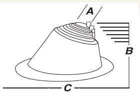
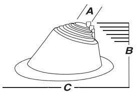
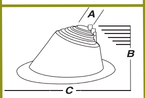
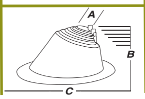
- **Made for Weather Resistance**
  Made to withstand the damaging effects of ultraviolet light and Ozone.
- **Roof Adaptability**
  The base is designed to mold to most panel configurations and roof pitches regardless of pipe location.
- **Cut to Fit**
  Easy to see pipe diameters make for painless on site customization.
- **Easy Install Snaps Included**
- **Design Excellence**
  Specially designed for square vent applications, sleeve flexibility accommodates vibration and pipe movement caused by expansion/ contraction. Easy on-site customization accommodates all normal installations.

	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
#1	2-1/2"- 4" (63-101mm)	BLACK EPDM	**FM-RF101BP-SQ**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	2-1/2" (63mm) 2-1/2" to 4" (63-101mm) 8" (203.2mm)
#2	2-1/4"- 5" (57-127mm)	BLACK EPDM	**FM-RF201BP-SQ**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	2-1/4" (57mm) 2-1/4" to 5" (57-127mm) 15-3/4" (400mm)

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

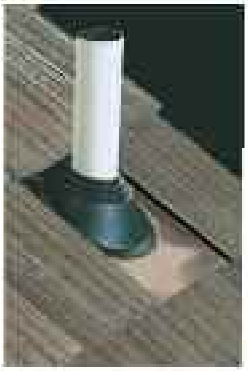
Residential Flash Master

20 YEAR WARRANTY

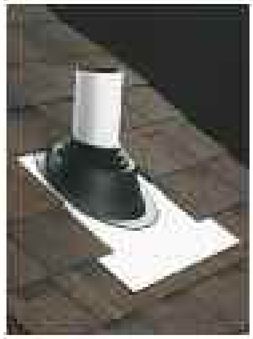
	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
MINI	1/4" - 3" 6.35 - 76.2mm	BLACK EPDM GREY EPDM SILICONE	**FM-RS051BA** **FM-RS051GA** **FM-RS052RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	Closed 1/4" - 3" (6.35 - 76.2mm) 16" X 9-1/4" (410 X 490mm)
#1	3' - 8" 76.2 - 203.2mm	BLACK EPDM GREY EPDM SILICONE	**FM-RS101BA** **FM-RS101GA** **FM-RS102RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	2-1/2" (63.5mm) 3" - 8" (76.2 - 203.2mm) 20" X 24" (508 X 609.5mm)
#2	8" - 11" 203.1 - 279.4mm	BLACK EPDM GREY EPDM SILICONE	**FM-RS201BA** **FM-RS201GA** **FM-RS202RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	5-5/8"(142.875mm) 8" - 11"(203.1 - 279.4 mm) 26" X 30" (660.3 X 762mm)
#3	11" - 18" 279.4 - 457mm	BLACK EPDM GREY EPDM SILICONE	**FM-RS301BA** **FM-RS301GA** **FM-RS302RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	8-3/4" (222.2mm) 11" - 18" (279.4 - 457mm) 35" - 35" (889 X 889mm)

Four Sizes Accommodate Flues & Vents From 1/4" Diameter Through 18" Diameter.

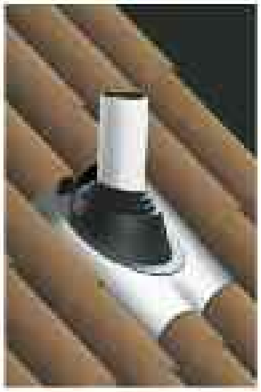
EPDM Rubber is available in black and grey or silicone is available.



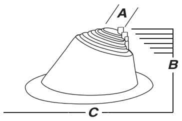
Wood Shingle

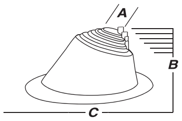


Tar Paper/Asphalt Shingles



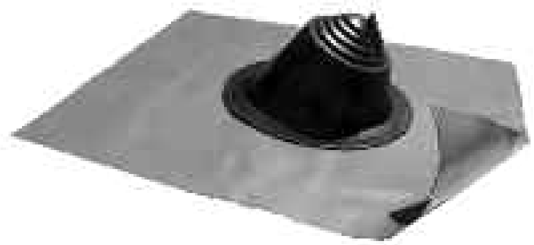
Clay Tile





- The addition of fire retarding agents milled directly into the rubber compound creates a self extinguishing feature which enables it to be used with type "B" vents. Listed with **IAPMO certification No.3121**
- The pull tab design and easy smooth tear grooving is intended to eliminate razor knived and allow for a circular hole
- "Environmentally safe" lead free aluminum base.
- A "C20" ASTM additional requirement was added to assure conformance to the most stringent ozone/weathering specifications available. This addition allows the rubber a 20 year life.
- The built in 20° pitch allows adaptability to almost any roof pitch including 45°

ISO 9001:2000 Certified
CERTIFICATE # 08-511

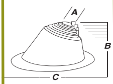
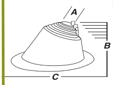
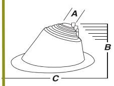
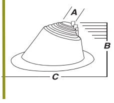


Res-Lead Flash Master

“Powder Coated Safe Lead”

20 YEAR WARRANTY

- **Weather Protection**
  Made of EPDM or Silicone, these flashings are compounded specifically for maximum resistance to weathering due to ozone and ultraviolet light.
- The pull tab design and easy smooth tear grooving is intended to eliminate razor knives and allow for a circular hole.
- The built in 20º pitch allows adaptability to almost any roof pitch including 45º
- A “C20” ASTM additional requirement was added to assure conformance to the most stringent ozone/weathering specifications available. This addition allows the rubber a 20 year life.
- **“ENVIRONMENTALLY SAFE”**
  Powder coated Safe-Lead metal base.

	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
MINI	1/4” - 3” 6.35 - 76.2mm	BLACK EPDM GREY EPDM SILICONE	**FM-RL051BA** **FM-RL051GA** **FM-RL052RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	Closed 1/4” - 3” (6.35 - 76.2mm) 16” X 9-1/4” (410 X 490mm)
#1	3’ - 8” 76.2 - 203.2mm	BLACK EPDM GREY EPDM SILICONE	**FM-RL101BA** **FM-RL101GA** **FM-RL102RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	2-1/2” (63.5mm) 3” - 8” (76.2 - 203.2mm) 20” X 24” (508 X 609.5mm)
#2	8” - 11” 203.1 - 279.4mm	BLACK EPDM GREY EPDM SILICONE	**FM-RL201BA** **FM-RL201GA** **FM-RL202RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	5-5/8”(142.875mm) 8” - 11”(203.1 - 279.4 mm) 26” X 30” (660.3 X 762mm)
#3	11” - 18” 279.4 - 457mm	BLACK EPDM GREY EPDM SILICONE	**FM-RL301BA** **FM-RL301GA** **FM-RL302RA**		A–Top opening diameter B–Cut to suit pipe size C–Base dimensions	8-3/4” (222.2mm) 11” - 18” (279.4 - 457mm) 35” - 35” (889 X 889mm)

EPDM rubber is available in black and grey or silicone
***Custom colors are available upon request, an additional cost may apply.**

RES-LEAD FLASH MASTER RUBBER COLORS…
White, grey, black, light and dark green, light and dark blue, terra cotta (red clay appearance) and bright red.
Base coloring options are available an additional cost may apply.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Master-Cap Flash Master

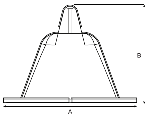
ALL NEW - Standing Seam Roof End Cap Flashing

20 YEAR WARRANTY

ISO Quality, Price & Availability

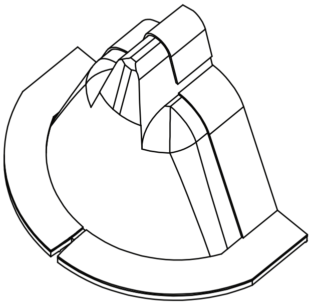
ADVANCED OZONE RESISTANCE tested to...	EPDM 70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE Tested to Intermittent Continuous	 +135°C (+275°F) +100°C (+212°F)
LOW TEMPERATURE RESISTANCE tested to...	– 55°C (-67°F)
TENSILE SET maximum	1OMPa (1450 psi)
COMPRESSION SET maximum...	25%

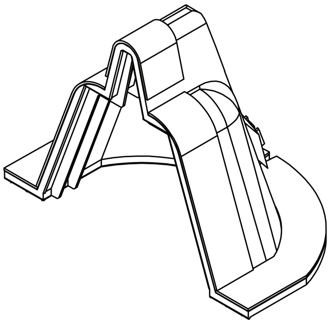
*Complete specification data and testing methods are available upon request.

	COMPOUND	PART NO.	FLASHING DETAILS		
MASTER CAP	BLACK EPDM	**FM-MC101BA**		A–Width B–Height	4" (101mm) 3-1/4" (82 mm)

Applications:

Skylights • Metal Curbs • Ridge Applications • Jobsite Retrofit



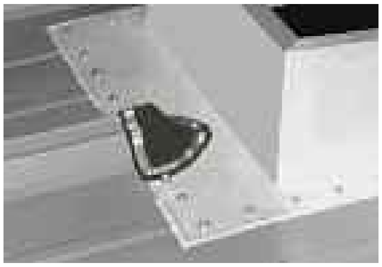


Flexibility

- Expansion feature accommodates all 3" seam heights.
- Flexible width allows for most panel configurations.

Base Features

- Allows side wall of end cap to form on roof panels.
- 3" base allows application at both terminating points of the sheeting or roofing material.
- Made of E.P.D.M., these flashings are compounded specifically for maximum resistance to weathering due to ozone and ultraviolet light.
- Available in a variety of color options.



IMSG

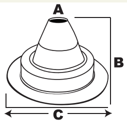
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Solar-Flash Flash Master

20
YEAR
WARRANTY

- The simple round base flashing is available in EPDM and silicone with a pre-cut hole for pipe sizes ¾” to 1” inch allowing for minimal on-site preparation and assembly.
- The pitch canal allows for maximum flexibility, easy accommodating up to a 60 degree pitch without affecting performance.
- Ozone and UV Protection Flashings are made of EPDM and Silicone, and are designed for maximum resistance to all weather conditions.

		EPDM	SILICONE
ADVANCED OZONE RESISTANCE tested to...		70 hour @ 500 pphm	70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE Tested to	Intermittent	+135°C (+275°F)	+260°C (+500°F)
	Continuous	+100°C (+212°F)	+225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...		– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum		1OMPa (1450 psi)	5 MPa (700 psi)
COMPRESSION SET maximum...		25%	50%

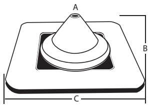
PIPE RANGE	COMPOUND	PART NO.	FLASHING DETAILS		
3/4” - 1” (19 - 25.3mm)	BLACK EPDM	**FM-SF101BA**		A-Top Opening Diameter B- Overall Height C-Base Diameter	.60” (15.24mm) 2-1/2" (63.5mm) 4” (101.6mm)
	SILICONE	**FM-SF101RA**			

Mini Standard Flash Master

Specifically designed for solar & electrical applications

ISO Quality, Price & Availability / TWO COMPOUNDS / 10 COLORS

		EPDM	SILICONE
ADVANCED OZONE RESISTANCE tested to...		70 hour @ 500 pphm	70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE Tested to	Intermittent	+135°C (+275°F)	+260°C (+500°F)
	Continuous	+100°C (+212°F)	+225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...		– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum		1OMPa (1450 psi)	5 MPa (700 psi)
COMPRESSION SET maximum...		25%	50%

PIPE RANGE	COMPOUND	PART NO.	FLASHING DETAILS		
(1/8”– 3/4”) 3.2mm - 19.1 mm	BLACK EPDM Grey EPDM SILICONE	**FM-SQ101BA** **FM-SQ101GA** **FM-SQ101RA**		A-Top opening diameter B-Cut to suit pipe size C-Base dimensions	1/16’ (1.6mm) 3.2-19.1mm (1/8” – 3/4”) 57.2mm (2 - 1/4”)

- **Weather Protection**
  Made of E.P.D.M. or Silicone, these flashings are compounded specifically for maximum resistance to weathering due to ozone and ultraviolet light.
- **Easy On-Site Customization**
  Fast, one piece construction allows for easy on-site installation in minutes.
- **Base Flexibility**
  The base is designed to form a seal on most panel configurations and roof pitches regardless of pipe/wire location.
- **Nine color options available**

Multi-Port Flash Master

Two Applications • One Design • Multiple Functions

20 YEAR WARRANTY

ISO Quality, Price & Availability TWO COMPOUNDS

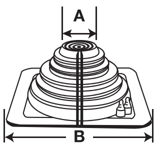
	EPDM	SILICONE
ADVANCED OZONE RESISTANCE tested to...	70 hour @ 500 pphm	70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE Tested to Intermittent Continuous	+135°C (+275°F) +100°C (+212°F)	+260°C (+500°F) +225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...	– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum COMPRESSION SET maximum...	1OMPa (1450 psi) 25%	5 MPa (700 psi) 50%

*Complete specification data and testing methods are available upon request.

- **Ozone and UV Protection**
  Flashings are made of EPDM and Silicone, and designed for maximum resistance to all weather conditions.
- **No Hassle Gripper**
  Single stainless steel gripper to secure retrofit applications only.
- **Adaptable Base**
  The base is designed to mold to most panel configurations and roof pitches regardless of pipe location.

Accommodates FOUR 1/4” (6mm) lines and 1 pipe 1/4” - 2-3/4” (6 - 70mm)

Up to 4 Cables or Wires per flashing.

PIPE RANGE	COMPOUND	PART NO.	FLASHING DETAILS		
STANDARD 1/4"-2-3/4" (6 - 70mm)	BLACK EPDM	**FM-MP101BA**		A-Base Diameter	Standard Only Closed
RETROFIT 1-1/4"-2-1/4" (25 - 57mm)	SILICONE	**FM-MP101RA**		B-Base Diameter	4-1/2” (114mm)

ISO 9001:2000 Certified
CERTIFICATE # 08-511

NEW - 35 Year Flash Master

35
YEAR
WARRANTY

The only ICC listed flashing for the Metal Building Industry with a 35 year warranty

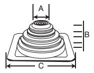
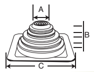
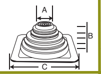
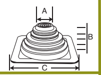
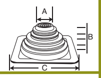
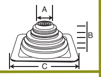
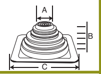
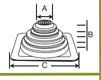
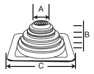
ICC & ISO Quality, Price & Availability / 9 Sizes

- 9 SIZES
- MADE OF EPDM, THIS FLASHING RESISTANCE TO ALL WEATHER CONDITIONS.
- THE BASE IS DESIGNED TO FIT VIRTUALLY ALL PANEL CONFIGURATIONS AND ROOF PITCHES REGARDLESS OF PIPE LOCATION.
- ON SITE CUSTOMIZATION.
- OZONE AND UV PROTECTED.
- DESIGNED FOR 1/4” TO 13” DIAMETER PIPES. VIRTUALLY ALL PANEL CONFIGURATIONS AND ROOF PITCHES REGARDLESS OF PIPE LOCATION.
- PIPE DIAMETERS CAN BE SEEN CLEARLY FOR PROPER PIPE FITTING.
- FLEXIBILITY ABSORBS VIBRATION AND PIPE MOVEMENT.

	EPDM	SILICONE
ADVANCED OZONE RESISTANCE tested to...	70 hour @ 500 pphm	70 hour @ 500 pphm
HIGH TEMPERATURE RESISTANCE Tested to Intermittent Continuous	+135°C (+275°F) +100°C (+212°F)	+260°C (+500°F) +225°C (+437°F)
LOW TEMPERATURE RESISTANCE tested to...	– 55°C (-67°F)	–74°C (–101°F)
TENSILE SET maximum	1OMPa (1450 psi)	5 MPa (700 psi)
COMPRESSION SET maximum...	25%	50%

SIZING CHART

Check diameter of pipe. Select the appropriate 35 Year Flash Master for pipe or duct diameter. Only use maximum pipe diameters on minimal roof angles. For extreme pitch or surface irregularity select next larger size. Then refer to the part number for the 35 Year Flash Master desired.

	PIPE SIZE	COMPOUND	PART NO.	FLASHING DETAILS		
Mini	1/8”– 3/4” (3.2 mm - 19.1 mm)	BLACK EPDM	**FM-ICC-SQ051B**		A-Top opening diameter	1/16” (1.6mm)
					B-Cut to suit pipe size	1/8” – 3/4” (3.2-19.1 mm)
					C-Base dimensions	2 - 1/4” (57.2 mm)
#1	1/4”- 2” (6.4 mm - 50.8 mm)	BLACK EPDM	**FM-ICC-SQ101B**		A-Top opening diameter	Closed
					B-Cut to suit pipe size	1/4” – 2” (6.4 -50.8 mm)
					C-Base dimensions	4-1/2” (114.3 mm)
#2	1-1/4”- 3” (31.8 mm - 76.2 mm)	BLACK EPDM	**FM-ICC-SQ201B**		A-Top opening diameter	7/8” (22.2 mm)
					B-Cut to suit pipe size	1-1/4” - 3” (31.8 - 76.2 mm)
					C-Base dimensions	6” (152.4mm)
#3	1/4” - 4” (6.3 mm - 101.6 mm)	BLACK EPDM	**FM-ICC-SQ301B**		A-Top opening diameter	Closed
					B-Cut to suit pipe size	1/4” – 4” (6.3 -101.6 mm)
					C-Base dimensions	8” (203.2 mm)
#4	3” - 6” (76.2 mm - 152.4 mm)	BLACK EPDM	**FM-ICC-SQ401B**		A-Top opening diameter	2-1/2” (63.5 mm)
					B-Cut to suit pipe size	3”– 6” (76.2 -152 mm)
					C-Base dimensions	10” (254 mm)
#5	4” - 7” (102 mm - 177.8 mm)	BLACK EPDM	**FM-ICC-SQ501B**		A-Top opening diameter	3-1/2” (88.9 mm)
					B-Cut to suit pipe size	4” – 7” (102 - 177.8 mm)
					C-Base dimensions	11” (279.4 mm)
#6	5” - 9” (127 mm - 228.6 mm)	BLACK EPDM	**FM-ICC-SQ601B**		A-Top opening diameter	4” (101.6 mm)
					B-Cut to suit pipe size	5” – 9” (127 - 228.6 mm)
					C-Base dimensions	12” (304.8 mm)
#7	6” - 11” (152.4 mm -279.4 mm)	BLACK EPDM	**FM-ICC-SQ701B**		A-Top opening diameter	5” (127 mm)
					B-Cut to suit pipe size	6” – 11” (152.4 - 279.4 mm)
					C-Base dimensions	14” (355.6 mm)
#8	7” - 13” (177.8 mm - 330.2 mm)	BLACK EPDM	**FM-ICC-SQ801B**		A-Top opening diameter	6” (152.4 mm)
					B-Cut to suit pipe size	7” – 13” (177.8 - 330 mm)
					C-Base dimensions	17” (431.8 mm)

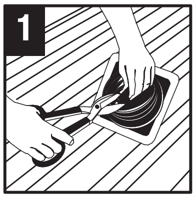
ICC ES

35 Year Flash Master

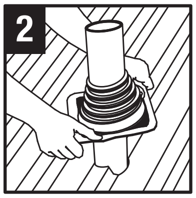
Compliance with the following codes:
- 2006 International Building Code® (IBC)
- 2006 International Residential Code® (IRC)

ICC-ES is the United States’ leading source of technical information on building products and building technology for code compliance.
ICC-ES performs technical evaluations of building products, components, methods and materials.
The evaluation process culminates with the issuance of reports on compliance with the major U.S. building codes, which are available at www.icc-es.org.

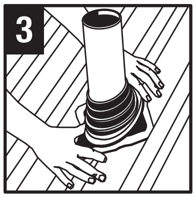
ICC-ES is a subsidiary of the International Code Council, a membership association dedicated to building safety and fire prevention that develops the codes used to construct residential and commercial buildings, including homes and schools. Most U.S. cities, counties and states that adopt codes choose the International Codes developed by the International Code Council.



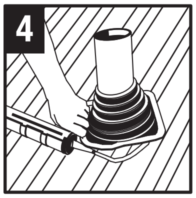
Choose Pipe Opening and Trim



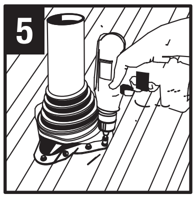
Slide Over Pipe



Form to Roof Profile



Apply Sealant



Fasten to Complete

POP RIVET & WELL NUTS / JACK NUTS

POP NUT™ TK
Open End Blind
Rivet Nuts
9-1

POP NUT™ TL
Open End Blind
Rivet Nuts
9-2

POP NUT™ TH
Open End Blind
Rivet Nuts
9-3

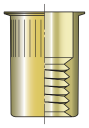
POP NUT™ ST
Open End Blind
Rivet Nuts
9-4

JACK NUT®
Inch/Metric
Threaded Inserts
9-5

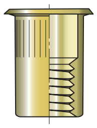
WELL NUT®
Inch Threaded
Inserts
9-6

WELL NUT®
Metric Threaded
Inserts
9-7

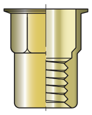
POP NUT™
Installation
Systems
9-8, 9-9



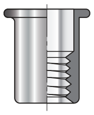
POP NUT™ TK
The POP NUT TK Round body thin head allows the mating part to install nearly flush without a recess or dimple in the parent material.



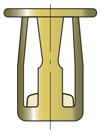
POP NUT™ TL
The POP NUT TL Round Knurled body flat head provides excellent spin out resistance in round drilled, punched or molded holes.



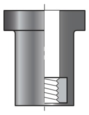
POP NUT™ TH
The POP NUT TH Hex body flat head provides excellent spin out in hex punched, laser cut or molded holes.



POP NUT™ ST
The POP NUT ST Round body flat head features a thick wall design that is ideal for push out applications such as leg leveling screws.



JACK NUT™
The JACK NUT Slotted body flat head design that is ideal for soft materials.



WELL NUT™
The WELL NUT is a rubber blind nut that is ideal for sealing and isolation against vibration, electrical conductivity and galvanic corrosion.

ESTCO
POP Rivet & Well Nuts/Jack Nuts

ENTERPRISES, INC.

Engineering Solutions through Quality Products, since 1970.

POP NUT™ TK
Open End Blind Rivet Nuts

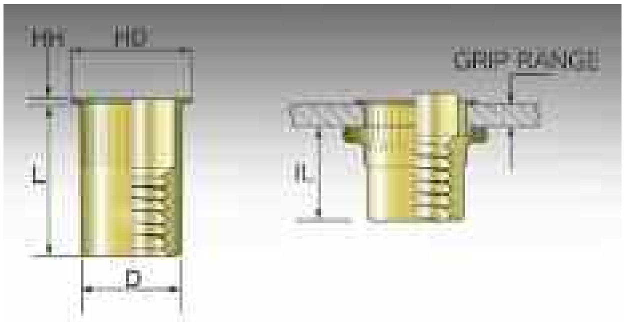
- **POP NUT™ TK**
  The POP NUT TK Open End Blind Rivet Nut has a thin head knurled body and is available in steel with zinc and yellow dichromate plating in both inch and metric thread sizes. The thin head allows for near flush attachment of the mating part without the need for recesses or sheet dimpling. The POP NUT TK features a wide grip range and excellent thread strength. Additional materials, finishes and design options are available.
  See page 12 for design option details.

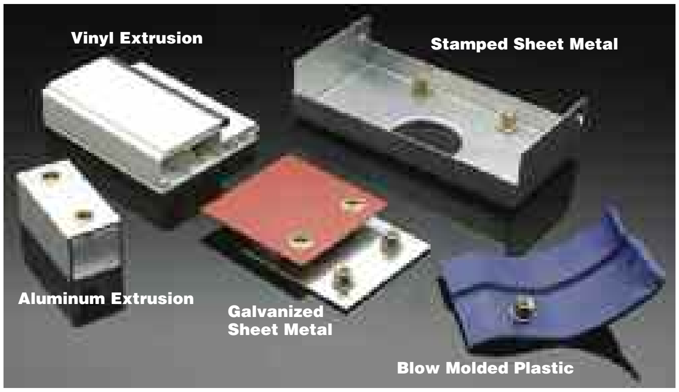
- **POP NUT™ TK**
  The POP NUT TK Round body thin head allows the mating part to install nearly flush without a recess or dimple in the parent material.

Part Number	Thread Size inch	Grip Range min-max	Hole Size +.006 / -.000	HD ±.010	HH ±.002	D max	L ±.015	IL ref
TKS1-632-080	6-32unc	.020-.080	0.266	0.310	0.019	0.265	0.420	0.288
TKS1-632-130	6-32unc	.080-.130	0.266	0.310	0.019	0.265	0.470	0.288
TKS1-832-080	8-32unc	.020-.080	0.266	0.310	0.019	0.265	0.420	0.288
TKS1-832-130	8-32unc	.080-.130	0.266	0.310	0.019	0.265	0.470	0.288
TKS1-1024-130	10-24unc	.020-.130	0.297	0.340	0.019	0.296	0.475	0.280
TKS1-1024-225	10-24unc	.130-.225	0.297	0.340	0.019	0.296	0.585	0.284
TKS1-1032-130	10-32unf	.020-.130	0.297	0.340	0.019	0.296	0.475	0.280
TKS1-1032-225	10-32unf	.130-.225	0.297	0.340	0.019	0.296	0.585	0.284
TKS1-420-165	1/4-20unc	.027-.165	0.391	0.455	0.022	0.390	0.580	0.343
TKS1-420-260	1/4-20unc	.165-.260	0.391	0.455	0.022	0.390	0.680	0.331
TKS1-518-150	5/16-18unc	.027-.150	0.531	0.595	0.022	0.530	0.690	0.441
TKS1-518-312	5/16-18unc	.150-.312	0.531	0.595	0.022	0.530	0.805	0.398
TKS1-616-150	3/8-16unc	.027-.150	0.531	0.595	0.022	0.530	0.690	0.441
TKS1-616-312	3/8-16unc	.150-.312	0.531	0.595	0.022	0.530	0.805	0.398
Part Number	**Thread Size metric**	**Grip Range min-max**	**Hole Size +0.15 / -0.00**	**HD ±.025**	**HH ±0.05**	**D max**	**L ±0.38**	**IL ref**
TKS1-470-20	M4	0.50-2.00	6.75	7.87	0.48	6.73	10.67	7.30
TKS1-470-33	M4	2.00-3.30	6.75	7.87	0.48	6.73	11.94	7.30
TKS1-580-33	M5	0.50-3.30	7.60	8.64	0.48	7.52	12.07	7.10
TKS1-580-57	M5	3.30-5.70	7.60	8.64	0.48	7.52	14.86	7.20
TKS1-610-42	M6	0.70-4.20	10.00	11.56	0.55	9.91	14.73	8.70
TKS1-610-66	M6	4.20-6.60	10.00	11.56	0.55	9.91	17.27	8.40
TKS1-8125-38	M8	0.70-3.80	13.50	15.11	0.55	13.46	17.53	11.29
TKS1-8125-79	M8	3.80-7.90	13.50	15.11	0.55	13.46	20.45	10.10
TKS1-1015-38	M10	0.70-3.80	13.50	15.11	0.55	13.46	17.53	11.20
TKS1-1015-79	M10	3.80-7.90	13.50	15.11	0.55	13.46	20.45	10.10

Specifications

Material:	Steel 1010/1008
Plating:	Zinc Yellow per ASTM B633 Type II Fe/Zn .0003"; 8 µm
Thread Class:	Inch – 2B/21 per ASME B1.1 Metric – 6H/21 per ASME B1.13M



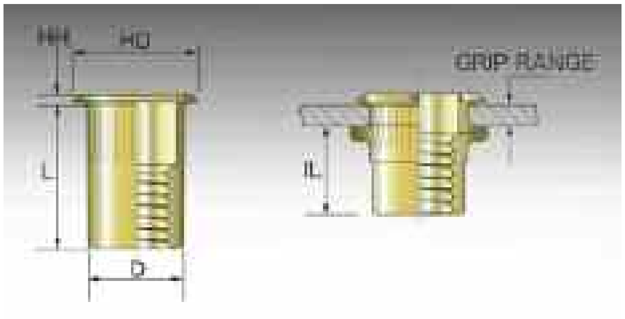


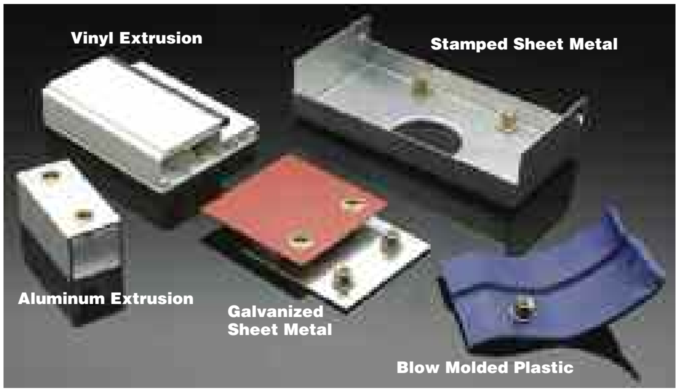
ISO 9001:2000 Certified
CERTIFICATE # 08-511

POP NUT™ TL
Open End Blind Rivet Nuts

Part Number	Thread Size inch	Grip Range min-max	Hole Size +.006 / -.000	HD ±.010 / ±.025*	HH ±.003	D max	L ±.015	IL ref
TLS1-632-080	6-32unc	.020-.080	0.266	0.390	0.030	0.265	0.420	0.292
TLS1-632-130	6-32unc	.080-.130	0.266	0.390	0.030	0.265	0.470	0.292
TLS1-832-080	8-32unc	.020-.080	0.266	0.390	0.030	0.265	0.420	0.292
TLS1-832-130	8-32unc	.080-.130	0.266	0.390	0.030	0.265	0.470	0.292
TLS1-1024-130	10-24unc	.020-.130	0.297	0.415	0.030	0.296	0.475	0.284
TLS1-1024-225	10-24unc	.130-.225	0.297	0.415	0.030	0.296	0.585	0.296
TLS1-1032-130	10-32unf	.020-.130	0.297	0.415	0.030	0.296	0.475	0.284
TLS1-1032-225	10-32unf	.130-.225	0.297	0.415	0.030	0.296	0.585	0.296
TLS1-420-165	1/4-20unc	.027-.165	0.391	0.500	0.030	0.390	0.580	0.343
TLS1-420-260	1/4-20unc	.165-.260	0.391	0.500	0.030	0.390	0.680	0.331
TLS1-518-150	5/16-18unc	.027-.150	0.531	0.685*	0.035	0.530	0.690	0.437
TLS1-518-312	5/16-18unc	.150-.312	0.531	0.685*	0.035	0.530	0.805	0.394
TLS1-616-150	3/8-16unc	.027-.150	0.531	0.685*	0.035	0.530	0.690	0.437
TLS1-616-312	3/8-16unc	.150-.312	0.531	0.685*	0.035	0.530	0.805	0.394
TLS1-813-200	1/2-13unc	.063-.200	0.688	0.865*	0.047	0.685	1.150	0.811
TLS1-813-350	1/2-13unc	.200-.350	0.688	0.865*	0.047	0.685	1.300	0.803

Part Number	Thread Size metric	Grip Range min-max	Hole Size +0.15 / -0.00	HD ±0.25 / ±0.64*	HH ±0.08	D max	L ±0.38	IL ref
TLS1-470-20	M4	0.50-2.00	6.75	9.91	0.76	6.73	10.67	7.40
TLS1-470-33	M4	2.00-3.30	6.75	9.91	0.76	6.73	11.94	7.40
TLS1-580-33	M5	0.50-3.30	7.60	10.54	0.76	7.52	12.07	7.20
TLS1-580-57	M5	3.30-5.70	7.60	10.54	0.76	7.52	14.86	7.50
TLS1-610-42	M6	0.70-4.20	10.00	12.70	0.76	9.91	14.73	8.70
TLS1-610-66	M6	4.20-6.60	10.00	12.70	0.76	9.91	17.27	8.40
TLS1-8125-38	M8	0.70-3.80	13.50	17.40*	0.89	13.46	17.53	11.10
TLS4-8125-79	M8	3.80-7.90	13.50	17.40*	0.89	13.46	20.45	10.00
TLS1-1015-38	M10	0.70-3.80	13.50	17.40*	0.89	13.46	17.53	11.10
TLS1-1015-79	M10	3.80-7.90	13.50	17.40*	0.89	13.46	20.45	10.00
TLS1-12175-51	M12	1.60-5.10	17.45	21.97*	1.19	17.40	29.21	20.60
TLS1-12175-89	M12	5.10-8.90	17.45	21.97*	1.19	17.40	33.02	20.40





- **POP NUT™ TL**
  The POP NUT TL Open End Blind Rivet Nut has a flat head knurled body and is available in steel with zinc and yellow dichromate plating in both inch and metric thread sizes. The flat head provides support for the parent material and the mating part. The knurled body provides excellent spin out resistance in aluminum and plastics and features a wide grip range and excellent thread strength.

- Additional materials, finishes and special design options are available. See page 12 for design option details.

- **POP NUT™ TL**
  The POP NUT TL Round Knurled body flat head provides excellent spin out resistance in round drilled, punched or molded holes.

Specifications

Material:	Steel 1010/1008
Plating:	Zinc Yellow per ASTM B633 Type II Fe/Zn .0003”; 8 µm
Thread Class:	Inch – 2B/21 per ASME B1.1 Metric – 6H/21 per ASME B1.13M

ISO 9001:2000 Certified
CERTIFICATE # 08-511

POP NUT™ TH
Open End Blind Rivet Nuts

- **POP NUT™ TH**
  The POP NUT TH Open End Blind Rivet Nut has a flat head hex body and is available in steel with zinc and yellow dichromate plating in both inch and metric thread sizes. When installed in a hex hole, the hex body provides the ultimate spin out resistance.

  Additional materials, finishes and special design options are available. See page 12 for design option details.

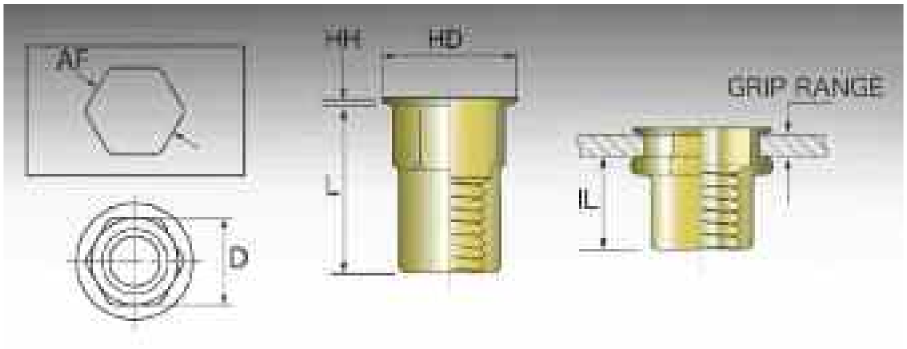
- **POP NUT™ TH**
  The POP NUT TH Hex body flat head provides excellent spin out in hex punched, laser cut or molded holes.

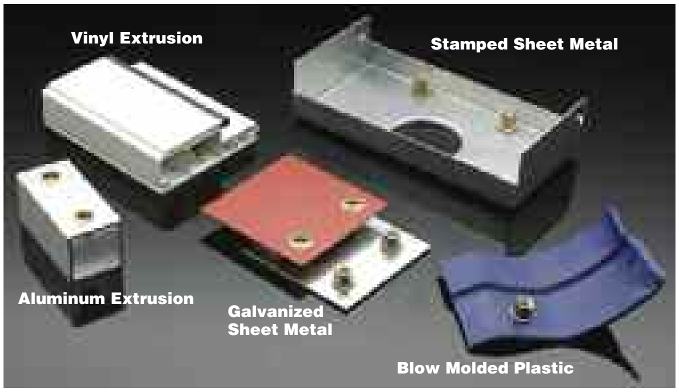
Part Number	Thread Size inch	Grip Range min-max	Hole Size (AF) +.004 / -.000	HD ±.010 / ±.025*	HH ±.003	D max	L ±.015	IL ref
THS1-632-080	6-32unc	.020-.080	0.250	0.375	0.027	0.249	0.385	0.252
THS1-632-130	6-32unc	.080-.130	0.250	0.375	0.027	0.249	0.435	0.248
THS1-832-080	8-32unc	.020-.080	0.250	0.375	0.027	0.249	0.385	0.252
THS1-832-130	8-32unc	.080-.130	0.250	0.375	0.027	0.249	0.435	0.248
THS1-1024-130	10-24unc	.020-.130	0.281	0.390	0.027	0.280	0.435	0.252
THS1-1024-225	10-24unc	.130-.225	0.281	0.390	0.027	0.280	0.535	0.260
THS1-1032-130	10-32unf	.020-.130	0.281	0.390	0.027	0.280	0.435	0.252
THS1-1032-225	10-32unf	.130-.225	0.281	0.390	0.027	0.280	0.535	0.260
THS1-420-165	1/4-20unc	.027-.165	0.375	0.510	0.030	0.374	0.585	0.359
THS1-420-260	1/4-20unc	.165-.260	0.375	0.510	0.030	0.374	0.685	0.355
THS1-518-150	5/16-18unc	.027-.150	0.500	0.655*	0.035	0.499	0.685	0.453
THS1-518-312	5/16-18unc	.150-.312	0.500	0.655*	0.035	0.499	0.845	0.457
THS1-616-150	3/8-16unc	.027-.150	0.500	0.655*	0.035	0.499	0.685	0.453
THS1-616-312	3/8-16unc	.150-.312	0.500	0.655*	0.035	0.499	0.845	0.457

Part Number	Thread Size inch	Grip Range min-max	Hole Size (AF) +0.10 / -0.00	HD ±0.25 / ±0.64*	HH ±0.08	D max	L ±0.38	IL ref
THS1-470-20	M4	0.50-2.00	6.35	9.53	0.68	6.35	9.78	6.40
THS1-470-33	M4	2.00-3.30	6.35	9.53	0.68	6.35	11.05	6.30
THS1-580-33	M5	0.50-3.30	7.14	9.91	0.68	7.10	11.05	6.40
THS1-580-57	M5	3.30-5.70	7.14	9.91	0.68	7.10	13.59	6.60
THS1-610-42	M6	0.70-4.20	9.53	12.96	0.76	9.50	14.86	9.10
THS1-610-66	M6	4.20-6.60	9.53	12.96	0.76	9.50	17.40	9.00
THS1-8125-38	M8	0.70-3.80	12.70	16.64*	0.89	12.70	17.40	11.50
THS1-8125-79	M8	3.80-7.90	12.70	16.64*	0.89	12.70	21.46	11.60
THS1-1015-38	M10	0.70-3.80	12.70	16.64*	0.89	12.70	17.40	11.50
THS1-1015-79	M10	3.80-7.90	12.70	16.64*	0.89	12.70	21.46	11.60

Specifications

Material:	Steel 1010/1008
Plating:	Zinc Yellow per ASTM B633 Type II Fe/Zn .0003"; 8 µm
Thread Class:	Inch – 2B/21 per ASME B1.1 Metric – 6H/21 per ASME B1.13M





IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

POP NUT™ ST

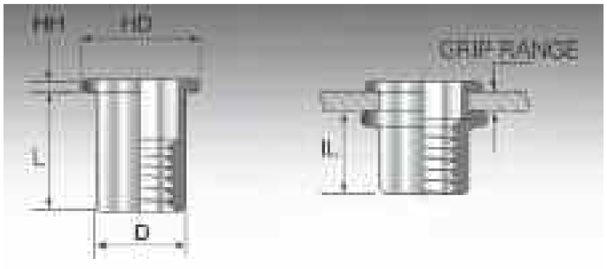
Open End Blind Rivet Nuts

Part Number	Thread Size inch	Grip Range min-max	Hole Size +.003 / -.000	HD ±.015	HH nom	D +.000 / -.004	L ±.015	IL ref
STS1-420-080	1/4-20unc	.020-.080	0.332	0.475	0.058	0.332	0.625	0.449
STS1-420-140	1/4-20unc	.080-.140	0.332	0.475	0.058	0.332	0.687	0.453
STS1-420-200	1/4-20unc	.140-.200	0.332	0.475	0.058	0.332	0.750	0.453
STS1-518-125	5/16-18unc	.030-.125	0.413	0.665	0.062	0.413	0.750	0.516
STS1-518-200	5/16-18unc	.125-.200	0.413	0.665	0.062	0.413	0.875	0.563
STS1-616-115	3/8-16unc	.030-.115	0.490	0.781	0.088	0.490	0.844	0.598
STS1-616-200	3/8-16unc	.115-.200	0.490	0.781	0.088	0.490	0.938	0.598
STS1-813-150	1/2-13unc	.050-.150	0.625	0.906	0.085	0.625	0.906	0.614
STS1-813-250	1/2-13unc	.150-.250	0.625	0.906	0.085	0.625	1.031	0.614

- **POP NUT™ ST**
  The POP NUT ST Open End Blind Rivet Nut has a flat head and thick walled round body and is available with zinc plating in inch thread sizes. This thick walled product is ideal for leg leveling screw applications as this fastener provides the best overall push out strength.

- Additional materials, finishes and special design options are available. See page 12 for design option details.

- **POP NUT™ ST**
  The POP NUT ST Round body flat head features a thick wall design that is ideal for push out applications such as leg leveling screws.



Specifications

Material:	Steel 1010/1008
Plating:	Zinc Yellow per ASTM B633 Type II Fe/Zn .0003"; 8 μm
Thread Class:	Inch – 2B/21 per ASME B1.1 Metric – 6H/21 per ASME B1.13M

ISO 9001:2000 Certified
CERTIFICATE # 08-511

JACK NUT®

Inch/Metric Threaded Inserts

- **JACK NUT®**
  The JACK NUT is a flat head slotted body blind rivet nut designed to be installed in soft or brittle materials such as plastic, paper, or glass. Its 4 legs expand behind the parent material providing excellent pull out resistance especially in soft materials.
  The JACK NUT can be coated with RAINTITE® to seal moisture and hard plastic PVC to prevent scratching and galvanic corrosion. JACK NUT inserts are RoHS compliant.
- The JACK NUT Slotted body flat head design that is ideal for soft materials.

Dimensions & Specifications									Test Results @ Plate Thickness (T)		
Catalog Number	Part Number	Thread Size	Body Diameter	Hole Size min-max D	Grip Range min-max	Length nom L	Head Height HH	Head Diameter HD	Plate Thickness in	Tightening Torque in-lb	Ultimate Tensile lb
STEEL (INCH)											
4SJN	310000	6-32	0.308	0.318 - 0.330	0.015 - 0.187	0.663	0.073	0.469	0.031 0.187	12 12	334 433
4LJN	310010	6-32	0.308	0.318 - 0.330	0.187 - 0.375	0.900	0.073	0.480	0.187 0.375	12 12	444 386
6SJN	310020	10-24	0.378	0.382 - 0.400	0.015 - 0.187	0.703	0.073	0.531	0.031 0.187	20 20	427 640
6LJN	310030	10-24	0.378	0.382 - 0.400	0.187 - 0.375	0.875	0.073	0.531	0.187 0.375	20 20	692 554
8SJN	310040	1/4-20	0.438	0.438 - 0.450	0.015 - 0.187	0.718	0.073	0.625	0.031 0.187	30 30	482 820
8LJN	310050	1/4-20	0.438	0.438 - 0.450	0.187 - 0.375	0.906	0.073	0.625	0.187 0.375	30 30	906 806
BRASS (INCH)											
4SBJN*	310100	6-32	0.308	0.318 - 0.330	0.015 - 0.187	0.663	0.073	0.469	0.031 0.187	** **	** **
6SBJN*	310120	10-24	0.378	0.382 - 0.400	0.015 - 0.187	0.703	0.073	0.531	0.031 0.187	** **	** **
8SBJN*	310140	1/4-20	0.438	0.438 - 0.450	0.015 - 0.187	0.718	0.073	0.625	0.031 0.187	** **	** **
8LBJN*	310150	1/4-20	0.438	0.438 - 0.450	0.187 - 0.375	0.906	0.073	0.625	0.187 0.375	** **	** **
STEEL (METRIC)									mm	N-m	N
4SJN	310512	M4 x 0.7	7.82	8.08 - 8.38	.381 - 4.75	16.84	1.85	11.91	0.79 4.75	1.36 1.36	1437 1552
4LJN	310516	M4 x 0.7	7.82	8.08 - 8.38	4.75 - 9.53	22.86	1.80	12.19	4.75 9.53	1.36 1.36	2086 1966
6SJN	310504	M5 x 0.8	9.60	9.70 - 10.16	.381 - 4.75	17.86	1.85	13.49	0.79 4.75	2.26 2.26	1668 2873
6LJN	310506	M5 x 0.8	9.60	9.70 - 10.16	4.75 - 9.53	22.23	1.85	13.49	4.75 9.53	2.26 2.26	3127 3198
8SJN	310508	M6 x 1.0	11.13	11.13 - 11.43	.381 - 4.75	18.24	1.85	15.88	0.79 4.75	3.39 3.39	2277 4715
8LJN	310510	M6 x 1.0	11.13	11.13 - 11.43	4.75 - 9.53	23.01	1.85	15.88	4.75 9.53	3.39 3.39	3923 4243
BRASS (METRIC)											
4SBJN*	310134	M4 x.7	7.82	8.08 - 8.38	.381 - 4.75	16.84	1.85	11.91	0.79 4.75	** **	** **
6SBJN*	310126	M5 x .8	9.60	9.70 - 10.16	.381 - 4.75	17.86	1.85	13.49	0.79 4.75	** **	** **
8SBJN*	310143	M6 x 1.0	11.13	11.13 - 11.43	.381 - 4.75	18.24	1.85	15.88	0.79 4.75	** **	** **
8LBJN*	310146	M6 x 1.0	11.13	11.13 - 11.43	4.75 - 9.53	23.01	1.85	15.88	4.75 9.53	** **	** **

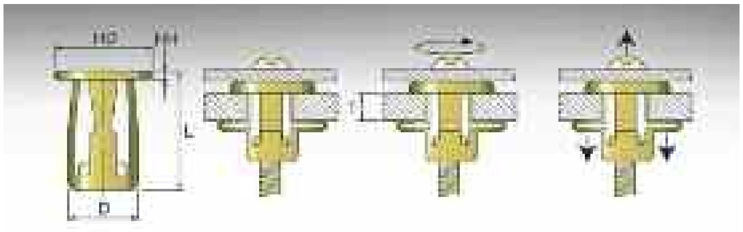
**Requires 25,000 minimum   **Refer to Factory   Note: Also available in Raintite® or PVC coating*

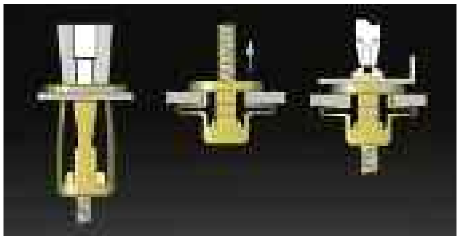
Specifications

Material:	Steel 1010/1008
Plating:	Zinc w/clear Trivalent Chromate per ASTM B633
Thread Class:	2B (in); 6H (mm)

How To Install:

1. Thread JACK NUT Insert onto mandrel of installation tool,
then insert all the way into predrilled hole until flange is firmly against mounting surface.
2. Fully collapse insert, then remove installation tool.
3. Pass machine screw through part to be fastened, then tighten until snug.


Standard Type   Installed   Torque   Tensile



ISO 9001:2000 Certified
CERTIFICATE # 08-511

WELL NUT®

Inch Threaded Inserts

					Dimensions & Specifications (Inch)					Test Results @ Plate Thickness (T)		
Catalog Number	Part Number	Thread Size	Body Diameter D	Hole Size nom	Grip Range min-max	Length L	Head Height HH	Head Diameter HD	Snap Diameter SD	Plate Thickness in	Tightening Torque in-lb	Ultimate Tensile lb
STANDARD												
C632	347024	6-32	0 .240	0.250	0.375 - 0.607	0.981	0.035	0.554	–	0.500	3	115
E632	347042	6-32	0.312	0.312	0.015 - 0.156	0.499	0.062	0.452	–	0.062	4	114
B832	347012	8-32	0.312	0.312	0.015 - 0.156	0.499	0.052	0.438	–	0.062	3	146
C832*	347025	8-32	0.312	0.312	0.015 - 0.172	0.560	0.060	0.750	–	0.063	3	130
L1024*	347233	10-24	0.375	0.375	0.030 - 0.277	0.767	0.187	0.562	–	0.125	5	95
10S	347108	10-32	0.377	0.377	0.015 - 0.192	0.554	0.036	0.500	–	0.125	5	230
10SL	347112	10-32	0.375	0.375	0.312 - 0.643	1.051	0.051	0.562	–	0.500	3	315
10XL*	347198	10-32	0.375	0.375	0.812 - 1.143	1.551	0.051	0.562	–	1.050	10	371
G1032	347048	10-32	0.377	0.377	0.030 - 0.227	0.807	0.187	0.750	–	0.125	5	277
H1032	347054	10-32	0.377	0.377	0.312 - 0.450	0.847	0.035	0.554	–	0.375	3	260
J1032	347064	10-32	0.377	0.377	0.030 - 0.227	0.700	0.080	0.750	–	0.125	5	225
Q1032	347088	10-32	0.377	0.377	0.035 - 0.232	0.665	0.040	0.562	–	0.125	5	265
1/4S	347102	¼-20	0.500	0.500	0.015 - 0.111	0.630	0.051	0.630	–	0.075	10	230
D1420	347030	¼-20	0.500	0.500	0.031 - 0.187	0.829	0.187	0.740	–	0.187	15	280
J1420	347068	¼-20	0.500	0.500	0.250 - 0.457	1.051	0.051	0.635	–	0.250	10	140
JL1420	347355	¼-20	0.500	0.500	0.625 - 0.830	1.432	0.422	0.625	–	0.375	10	445
JM1420*	347440	¼-20	0.500	0.500	0.215 - 0.422	1.440	0.440	0.650	–	0.250	10	445
W1420	347095	¼-20	0.500	0.500	0.197 - 0.342	0.801	0.051	0.635	–	0.187	10	360
AC1420*	347000	¼-20	0.562	0.562	0.280 - 0.500	1.301	0.051	0.635	–	0.397	20	251
E51618	347034	5⁄16-18	0.620	0.625	0.015 - 0.156	0.725	0.125	0.875	–	0.151	25	457
F51618*	347033	5⁄16-18	0.620	0.625	0.156 - 0.375	1.100	0.225	0.875	–	0.375	15	558
A3816	347008	⅜-16	0.750	0.750	0.015 - 0.437	1.062	0.187	1.250	–	0.437	20	1500
Z3816*	347098	⅜-16	0.750	0.750	0.015 - 0.125	1.050	0.350	1.750	–	0.125	30	1125
SNAP-IN												
2D832*	347029	8-32	0.310	0.312	0.015 - 0.050	0.430	0.050	0.500	0.375	0.031	5	91
A1024*	347004	10-24	0.375	0.375	0.015 - 0.050	0.562	0.125	0.562	0.407	0.031	5	156
NP1032	347280	10-32	0.375	0.375	0.015 - 0.050	0.400	0.059	0.510	0.407	0.050	5	230

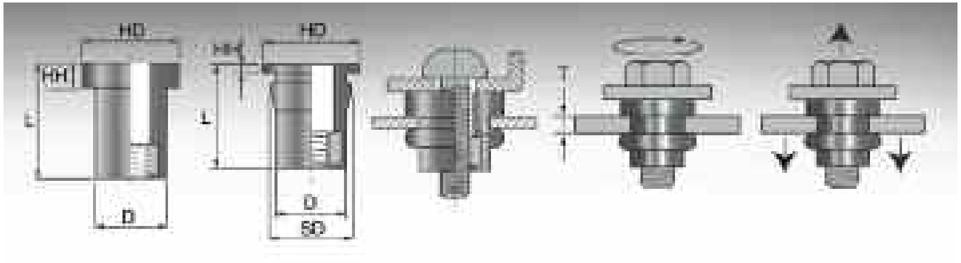
**Requires 25,000 minimum order.*

- **WELL NUT®**
  The WELL NUT is a flat head round body rubber blind rivet nut that is installed when the mating screw is tightened. The WELL NUT is available in Chloroprene for standard applications and EPDM when exposed to sunlight and ultra violet rays. The internal threads are made of brass. WELL NUT inserts are RoHS compliant.

WELL NUT advantages:

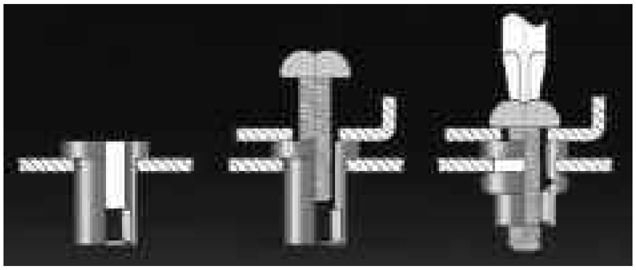
- Seals out ambient moisture
- Muffles noise
- Dampens vibrations and shock
- Isolates electrical conductivity
- Isolates galvanic corrosion between dissimilar assembled components
- Snap in version can be pre-attached to parent material
- Available in custom materials to meet specific application requirements

Standard Type **Snap-In Type** **Installed** **Torque** **Tensile**



Specifications

Body Material:	Chloroprene and EPDM
Nut Material:	Brass
Thread Class:	2B (in); 6H (mm)



ISO 9001:2000 Certified
CERTIFICATE # 08-511

WELL NUT®

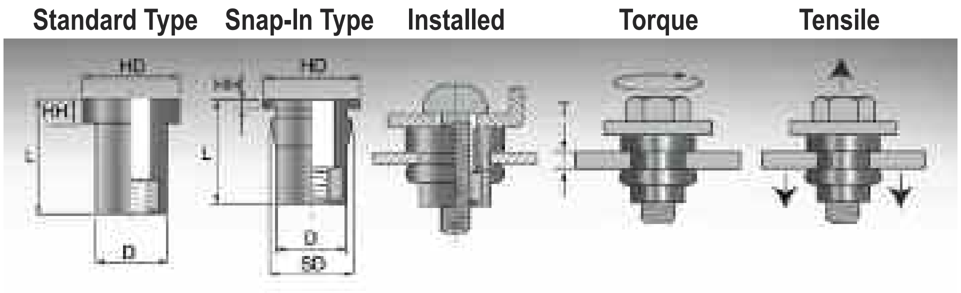
Metric Threaded Inserts

- **Standard and Snap-In Well Nut Installation**
  1. Place WELL NUT Insert all the way into predrilled hole until flange is firmly against mounting surface.
  2. Pass machine screw through part to be fastened.
  3. Tighten until snug.

Dimensions & Specifications (Metric) | **Test Results @ Plate Thickness (T)**

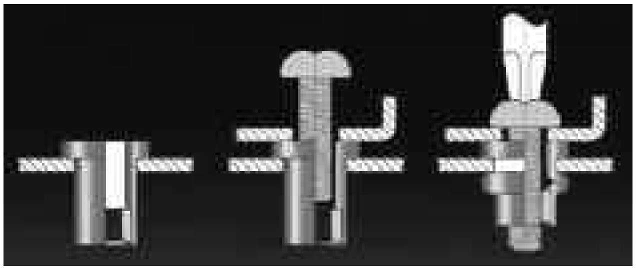
Catalog Number	Part Number	Thread Size	Body Diameter D	Hole Size nom	Grip Range min - max	Length L	Head Height HH	Head Diameter HD	Snap Diameter SD	Plate Thickness mm	Tightening Torque N-m	Ultimate Tensile N
STANDARD												
C632	347017	M3 x 0.5	6.10	6.35	9.53 - 15.42	24.92	0.89	14.07	–	12.7	0.34	512
E632	347043	M3 x 0.5	7.92	7.92	0.38 - 3.96	12.67	1.57	11.48	–	1.57	0.45	507
B832	347011	M4 x 0.7	7.92	7.92	0.38 - 3.96	12.67	1.32	11.13	–	1.57	0.34	649
C832*	347026	M4 x 0.7	6.10	7.92	0.38 - 4.37	14.22	1.52	19.05	–	1.60	0.34	578
L1024*	347089	M5 x 0.8	9.53	9.53	0.76 - 5.77	19.48	4.75	14.27	–	3.18	0.56	423
10S	347107	M5 x 0.8	9.58	9.58	0.38 - 4.88	14.07	0.91	12.70	–	3.18	0.56	1023
10SL	347111	M5 x 0.8	9.53	9.53	7.92 - 16.33	26.70	1.30	14.27	–	12.7	0.34	1401
10XL*	347141	M5 x 0.8	9.53	9.53	20.62 - 29.03	39.40	1.30	14.27	–	26.67	1.13	1650
G1032	347049	M5 x 0.8	9.58	9.58	0.76 - 5.77	20.50	4.75	19.05	–	3.18	0.56	1232
H1032	347051	M5 x 0.8	9.58	9.58	7.92 - 11.43	21.51	0.89	14.07	–	9.53	0.34	1156
J1032	347063	M5 x 0.8	9.58	9.58	0.76 - 5.77	17.78	2.03	19.05	–	3.18	0.56	1001
Q1032	347087	M5 x 0.8	9.58	9.58	0.89 - 5.89	16.89	1.02	14.27	–	3.18	0.56	1179
HSCM6X1	347261	M6 x 1.0	12.50	12.70	0.38 - 2.39	16.00	1.52	14.73	–	1.91	1.13	1001
EM6X1*	347247•	M6 x 1.0	12.50	12.70	0.38 - 2.39	16.00	1.30	17.25	–	0.79	1.58	534
ACM6X1*	347258•	M6 x 1.0	12.50	12.70	0.38 - 1.57	16.00	1.30	19.99	–	1.57	1.13	1308
1/4A*	347256	M6 x 1.0	12.70	12.70	0.38 - 1.27	15.98	2.82	15.98	–	1.91	1.13	1290
1/4S	347103	M6 x 1.0	12.70	12.70	0.38 - 2.82	16.00	1.30	16.00	–	1.91	1.13	1023
D1420	347031	M6 x 1.0	12.70	12.70	0.79 - 4.75	21.06	4.75	18.80	–	4.75	1.69	1245
J1420	347067	M6 x 1.0	12.70	12.70	6.35 - 11.61	26.70	1.30	16.13	–	6.35	1.13	1979
M6X1*	347254•	M6 x 1.0	12.70	12.70	0.38 - 2.39	16.00	1.30	19.99	–	1.91	1.13	992
MDM6X1*	347248	M6 x 1.0	12.70	12.70	0.79 - 4.75	21.06	4.75	18.80	–	4.75	1.69	1379
W1420	347093	M6 x 1.0	12.70	12.70	4.75 - 8.71	20.35	1.30	16.13	–	4.75	1.13	1601
E51618	347035	M8 x 1.25	15.88	15.88	0.38 - 3.96	18.42	3.18	22.23	–	3.84	2.82	2033
F51618*	347470	M8 x 1.25	15.75	15.88	3.96 - 9.53	27.94	5.71	22.22	–	9.53	1.69	2482
A51618*	347252	M8 x 1.25	19.00	19.05	0.38 - 6.02	27.00	5.00	32.00	–	4.75	2.26	1962
A3816*	347009	M8 x 1.25	19.05	19.05	0.38 - 11.10	26.97	4.75	31.75	–	11.10	2.26	6672
SNAP-IN												
2D832*	347027	M4 x 0.7	7.87	7.92	0.38 - 1.27	10.92	1.27	12.70	9.53	0.79	0.56	405
A1024*	347006	M5 x 0.8	9.53	9.53	0.38 - 1.27	14.27	3.18	14.27	10.34	0.79	0.56	694
NP1032	347266	M5 x 0.8	9.53	9.53	0.38 - 1.27	10.16	1.50	12.95	10.34	1.27	0.56	1023
W0811JS*	347410	M6 x 1.0	12.47	12.47	0.76 - 5.77	17.53	2.82	16.00	13.47	3.18	0.56	1023
ET51618*	347360	M8 x 1.25	15.88	15.88	0.38 - 3.00	27.99	8.48	22.20	17.25	3.18	0.9	1717

**Requires 25,000 minimum order. **Refer to factory. • Material is EPDM*



Specifications

Body Material:	Chloroprene and EPDM
Nut Material:	Brass
Thread Class:	2B (in); 6H (mm)



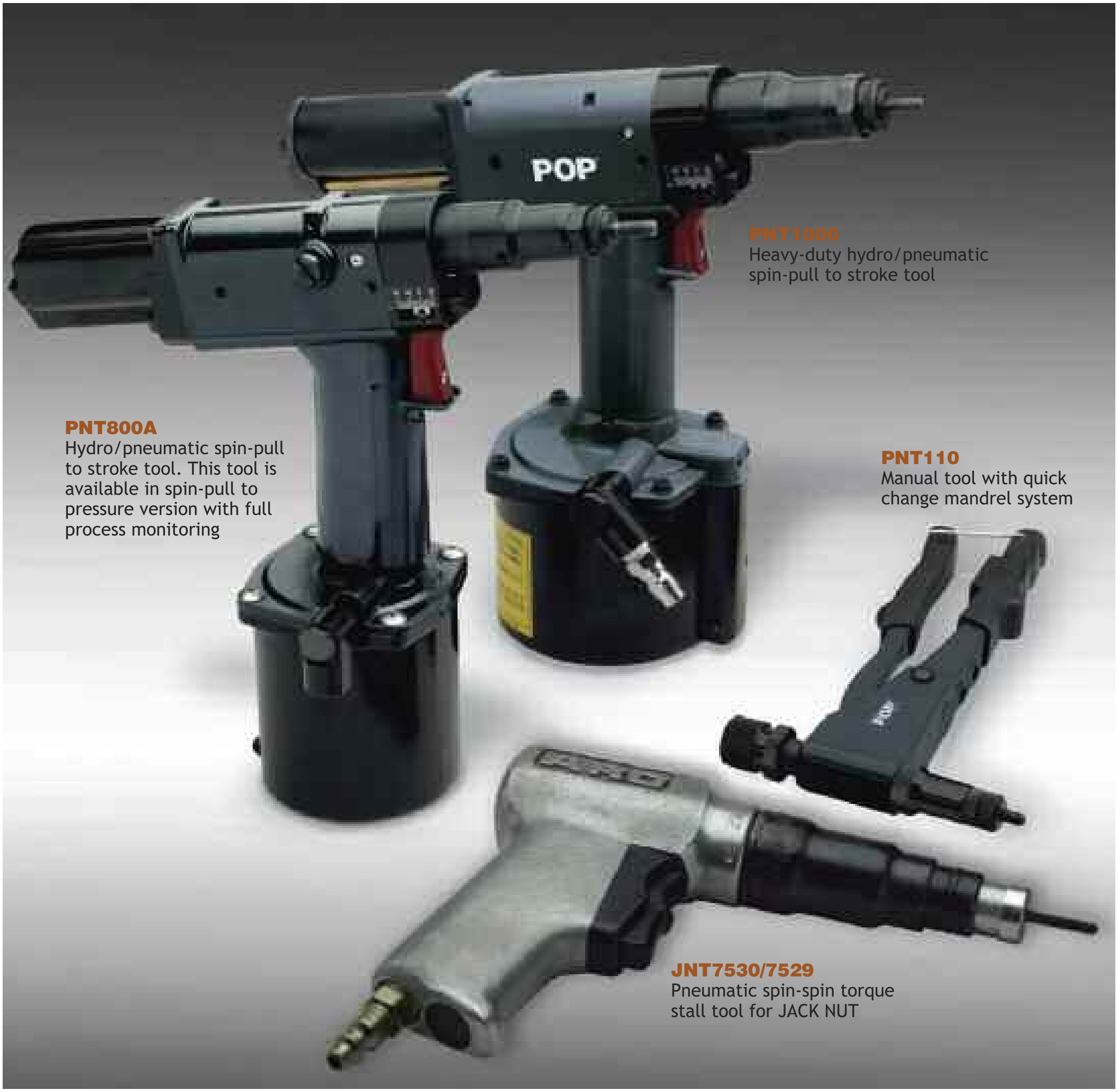
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Ask Estco for more information about Installation Systems!!

POP NUT®

Installation Systems

- **POP NUT™ TOOLS**
  POP NUT tools are designed to be ergonomic, rugged and dependable. Our hydro/pneumatic PNT800A and PNT1000 tools offer speed, low noise, light weight, single trigger operation, visual stroke indicator and a quick change mandrel system.



PNT1000
Heavy-duty hydro/pneumatic spin-pull to stroke tool

PNT800A
Hydro/pneumatic spin-pull to stroke tool. This tool is available in spin-pull to pressure version with full process monitoring

PNT110
Manual tool with quick change mandrel system

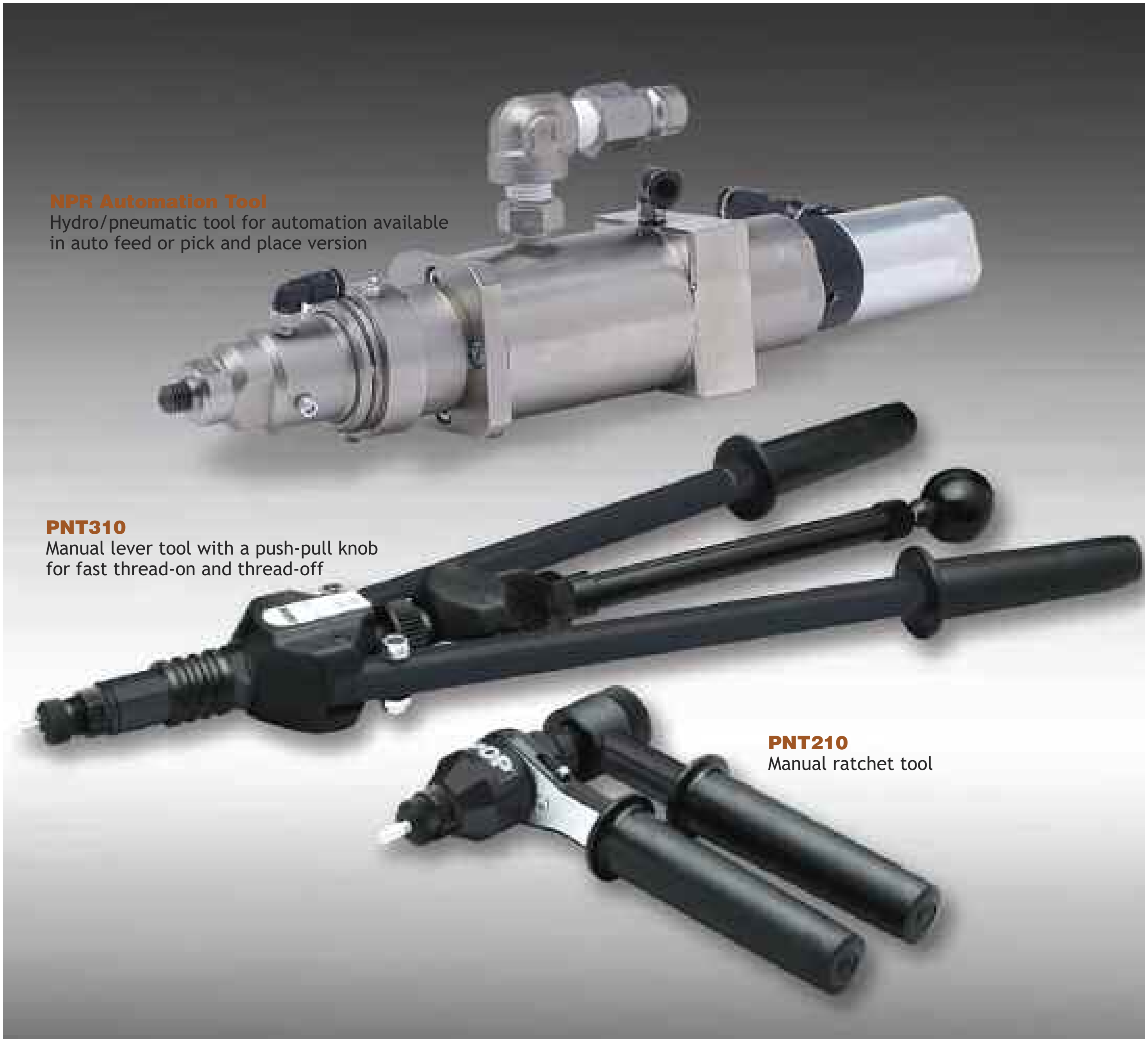
JNT7530/7529
Pneumatic spin-spin torque stall tool for JACK NUT

POP NUT®

Installation Systems

Ask Estco for more information about Installation Systems!!

- **POP NUT™ SYSTEMS**
  Estco Enterprises, Inc. also supplies specialized automation tools in both pick and place or auto feed versions. Our POP NUT automation tools can be purchased as separate items to be incorporated into a robotic automation system or a fixed station. Estco Enterprisesm Inc. can also provide any customized components that include feeders, boosters, process monitoring and controls.



NPR Automation Tool
Hydro/pneumatic tool for automation available in auto feed or pick and place version

PNT310
Manual lever tool with a push-pull knob for fast thread-on and thread-off

PNT210
Manual ratchet tool

SELF-FUSING SILICONE TAPES AND PRESS PADS

Self-Fusing Silicone Tapes
10-1, 10-2

SFT - Silicone, Self-Fusing Electrical Tape
10-3

Silicone Press Pads
10-4

ESTCO
Self-Fusing Silicone Tapes & Pads

SELF-FUSING SILICONE TAPES

Arlon and MOX-Tape® silicone tapes are produced from specially formulated silicone rubber. They bond irreversibly to provide an insulative barrier that is resistant to moisture, oxygen, ozone and corona over a wide temperature range (-65°F up to +500°F). Our products provide superior electrical insulation with a dielectric strength of 300VPM minimum at 356°F/180°C.

PERFORMANCE ADVANTAGES

- Resists moisture, oxygen, and ozone to assure continuous high insulation values.
- Conforms smoothly when wrapped around complex forms.
- Bonds to itself at room temperature within 24 hours.
- Remains non-tacky to the touch and does not adhere to other surfaces, or substrates.
- Insulates with single wrap, thereby reducing labor time and cost.
- Dampens vibration and resists heat and mechanical shock as well as corona.
- Inherently flame retardant and when burned forms a non-conductive ash. Meets the horizontal burn test criteria prescribed in FAR 25.853.
- SA & SB MOX-Tapes® provide a uniform thickness even around sharp edges. Fiberglass fabric, encapsulated inside the silicone rubber, prevents wicking and maintains high insulation resistance under high humidity conditions. These controlled stretch tapes provide a uniform insulation barrier.
- All tapes are protected by a special interleaved liner.

TYPICAL PROPERTIES

Thermal Stability	356°F/180°C
Temperature Range	-65°F to +500°F (-50°C to +260°C)
Volume Resistivity	1013 ohm-cm min. (ASTM D257)
Self Adhesion	2 p.p.i min. (ASTMD2148)
Hardness	50±10 Shore A (ASTM D2240)
Moisture Absorption	0.9% (46 hrs. in H2O @ 70°F)

NOTE: The above properties are published as a guide only, and should not be used for specifications without testing in your own laboratory.

APPLICATIONS

Mechanical:

- Protection of coils from vibration.
- Vibration fixture, anti-scratch, and clamping pads.
- Harness wrapping and wire bundling, including for high temperature applications.
- Applied to rollers for protection and traction.
- Plant maintenance.
- Superior, heavy duty repair tape for emergency insulating barrier.

Electrical:

- Insulation of field armature and interpole coils in large motors.
- Insulation for splicing and terminating of wire and cable.
- Insulating and sealing electrical connections.
- Insulating coil leads and bus bar connections.
- Electromagnetic coil insulation.
- Motor connections.
- Overwrapping of deteriorated insulation in reclaimed motors.

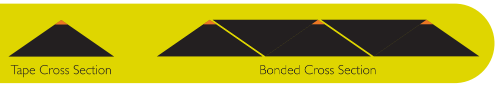
Environmental:

- On-board aviation and space applications.
- Underground cable splices.
- Insulating heated transfer lines.
- Insulating in radioactive environments.
- Masking agent utilized in manufacturing processes and powder coatings.
- Insulating, protecting, and sealing rigging hardware and power systems in marine applications.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

SELF-FUSING SILICONE TAPES CONTINUED...

Arlon LevelWrap® Tape

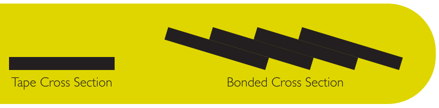


Levelwrap® has tapered edges and a colored line along its apex. The purpose of the line is to act as a guide for subsequent wraps in order to form a uniformly thick layer. MOX-Tape® 600-T series triangular unsupported tapes, which also meet various military and aerospace specifications, are also available.

LW _ _ _ _ _ _ - _ _ **Example: LW401R12-P0**

1 for Mil Spec testing. **0** if not
Liner Type. **P**olyethylene or **M**ylar
Length in Yards
Color. **R**ed, **B**lack, **W**hite or Grey (**X**)
Width in inches. Can be one to three digits. For example 125 for 1 1/4” wide tape or 2 for 2” wide. Available in 0.5” to 2” wide.
Thickness in mils. Available in 10 to 80 mils thick
Designates triangular Tape

Rectangular 600-R AND Triangular 600-T Series Tape



Rectangular tape is of uniform thickness and is ideal for applications where a smooth, even layer of tape is not required. Triangular tape has a center guideline for even wrapping. Arlon's MOX-Tape 600-R Rectangular and 600-TTriangular Series unsupported tapes meet various military and aerospace specifications.

9 _ _ - _ _ _ _ _ - _ _ **Example: 920-10R12-P0**

1 for Mil Spec testing. **0** if not
Liner Type. **P**olyethylene or **M**ylar
Length in Yards
Color. **R**ed, **B**lack, **W**hite or Grey (**X**)
Width in inches. For example 125 for 1 1/4” wide tape. Available in 0.5” to 2” wide.
Thickness in mils. Available in 10 to 80 mils thick
Designates Rectangular Tape

CERTIFICATIONS

- Tapes are manufactured under ISO9001:2000 certification. Products can also be certified to many of the following specifications upon request.

- MIL-I-46852C,Type I &Type II
- General Electric A50A493
- A-A-59163,Type I &Type II
- General Electric A50E112
- MIL-1-22444C
- General Dynamics P5384
- Boeing DMS2186 Type 1 & Type 2
- Rohr RMS315
- Lockheed Martin MMS J517
- FAR 25.853
- Lockheed Martin 5-00857
- UL listed

Arlon MOX-Tape® Fiberglass Reinforced Tape

These self-fusing silicone rubber tapes incorporate a sinusoidal fiberglass fabric that gives a controlled elongation and increased tear resistance. The SA series has a maximum elongation of 25% and the SB series has a maximum elongation of 15%. This reinforcement provides excellent mechanical characteristics while allowing the tape to conform to irregular shapes. The table below lists a few examples of reinforced tapes that are available.

ST - _ _ _ - _ _ _ **Example: ST-620-1 R**

Color. **R**ed, **B**lack
Width in inches. Can be one to two digits For example 05 for 1/2” wide tape or 1 for 1” wide. Available in 0.5” to 1.5” wide
Cross Section: 600 - 607 for triangular cross-section with colored guidelines. **612 - 630** for rectangular cross-section
Silicone Tape

ESTCO Enterprises, Inc. Standard Part No.	Thickness (inches)	Width (inches)	Elongation (%)	Break Strength (lbs)
ST-SA00520	0.02	1/2	25	40
ST-SB00520	0.02	1/2	15	40
ST-SA01015	0.015	1	25	40
ST-SB01015	0.015	1	15	40
ST-SA03030	0.03	3	25	40
ST-SB03030	0.03	3	15	40

ISO 9001:2000 Certified
CERTIFICATE # 08-511

SFT - Silicone, Self-Fusing Electrical Tape...

- Gray
- 0.012” thick x 1.0” wide x 10 yards long
- A low cost alternative to industry leading, silicone, self fusing tapes
- Resists moisture, oxygen, corona, and ozone exposure to assure continuous high insulation values
- Conforms smoothly when wrapped around complex forms.
- ROHS compliant
- Shelf Life is 5 years from the DOM when stored at 70° +/- 5°F and 50% RH
- Designed for continuous operation at 180°C

Arlon Silicone, Self-Fusing Electrical Tape® Tape

When looking for a silicone, self fusing tape, Arlon SFT is an affordable, easy to order, and highly functional, silicone, self-fusing tape. With over 30 years of in-service use in numerous highly demanding applications (such as aerospace and military) you can rely on Arlon SFT. The Arlon SFT product is gray in color and 0.012” thick x 1.0” wide x 10 yards long. The Arlon SFT product is lined with 0.001" thick x 1.1875" wide polyester liner and has electrical and mechanical properties that exceed most industry standards. By purchasing your silicone, self-fusing tape directly from Arlon, you will receive a high quality tape at an affordable price. This is possible because there is no middleman, as you will receive tape directly from the manufacturing facility.

The typical properties table below can be used to compare Arlon SFT versus industry leaders like 3M™ Scotch® 70 tape*:

Property	Arlon SFT	Test Method
Hardness (SAP)	50	ASTM D2240
Tensile Strength (psi)	1200	ASTM D412
Elongation (%)	612	ASTM D412
Dielectric Strength (VPM)	881	ASTM D149
Bond Strength (lbf/inch)	2.4	MIL-I-46852C / AA59163
Water Absorption (%wt)	0.38	MIL-I-46852C / AA59163

Silicone Press Pads

The Press Pads are a family of high performance, fiberglass reinforced, silicone sheets designed for flex and rigid-flex circuitry lamination. Press Pads provide excellent pressure uniformity with unparalleled consistency and longevity throughout their service life. Press Pads are the most cost effective press pad solution across a wide range of process pressures and temperatures.

Silicone Press Pads are specially formulated, reversion resistant silicone rubber composites designed for hydraulic and autoclave lamination. They act to distribute pressure in the lamination of circuit boards, high pressure laminates, laminated plastic, and electron circuitry. Silicone Press Pads are available in standard constructions or high performance construction.

Use of Silicone Press Pad materials eliminates the need for throw-away pressure distribution vehicles such as kraft paper, blotter paper, chipboard, and other nonwoven paper-like pads.

Press Pads provide uniform cushioning and precise control over heat rise. When used as shown, Press Pads will reduce “white-edges” and other problems caused by uneven surfaces and inconsistent B-stage flows.

- Long service life
- Uniform heat rise – use after use
- Reduced inventory
- Less handling
- No shedding
- Dimensionally stable
- Uniform cushioning – no hard spots
- Reduced storage
- Faster layup
- 48" wide rolls
- Standard reinforcement is fiberglass
- Custom constructions available upon request

Part Numbers

55173R062	UltraPad™ D75	(General Purpose)
55133R062	UltraPad™ D70	(Improved Pressure Uniformity and Long Service Life)
55073R062	UltraPad™ D65	(Best Pressure Uniformity for Critical Applications)
51073R031	UltraPad™ D65	(Fast Press)

Arlon UltraPad™ is also sold with a smooth surface (Ex. 55173R062D)
or with a smooth surface and talced (Ex. 55173R062DST)

Availability:

- 36" and 48" wide rolls
- Standard roll length 25 linear yards
- Standard reinforcement is fiberglass
- Standard is silicone on both sides but silicone on one side is available
- Custom constructions available upon request

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Notes:

THERMOPLASTIC RUBBER FEET

Round Thermoplastic Rubber Feet
11-1

Square Thermoplastic Rubber Feet
11-2

Rectangular Thermoplastic Rubber Feet
11-3

Miscellaneous Thermoplastic Rubber Feet
11-4

Round Polyethylene (PE) Feet
11-5

Collapsible Tilt Stands
11-6

Cable Straps
11-7

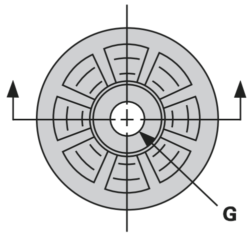
ESTCO
Thermoplastic Rubber Feet

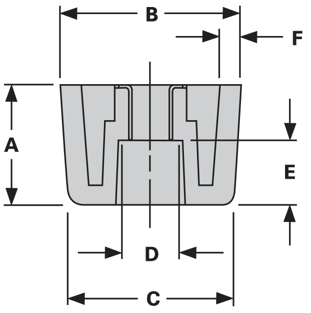
Round Thermoplastic Rubber Feet with Steel Support Bushing

- Molded from “Thermoplastic Rubber” Cabinet Feet provide good traction, excellent shock absorbing qualities and unlike natural rubber they have good non-marking qualities and outstanding resistance to stress cracking. A Trivalent Chromate plated steel Support Bushing absorbs the total fastener load allowing the foot to be mounted using a variety of screws or rivets without causing distortion to the foot itself. Excellent resistance to ozone, aging and most chemicals. Available in any color on special order.

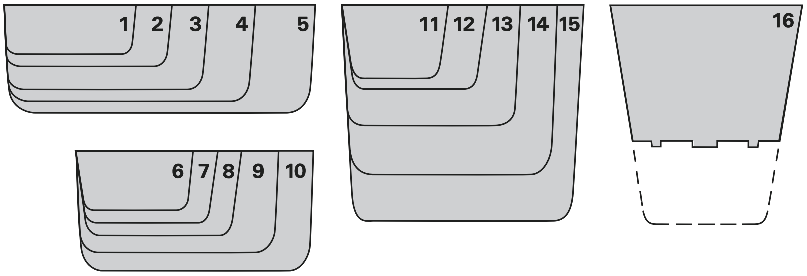
- **Stock Material:** Monsanto Santoprene (87 shore A)
- **Stock Colors:** Black or Medium Gray
- **RoHS:** Parts are RoHS Compliant.

PART NUMBER	KEY NO.	Height A	Dia. B	Dia. C	Recess Dia. D	Recess Depth E	Outer Wall	Insert I.D. & Screw Size T.H (Truss Head)	*Weight Capacity (per foot)
TPR-SF6	1	.250	.671	.583	.336	.136	.068	.155 #6 T.H.	6
TPR-SF8	2	.312	.859	.747	.395	.192	.097	.186 #8 T.H	10
TPR-SF10	3	.437	1.062	1.000	.468	.229	.115	.201 #10 T.H.	20
TPR-SF10-1	4	.500	1.312	1.242	.528	.184	.144	.215 #10 T.H.	33
TPR-SF10-2	5	.562	1.625	1.547	.524	.250	.179	.215 #10 T.H.	65
TPR-MF4	6	.312	.625	.537	.312	.127	.065	.108 #4 T.H.	6
TPR-MF6	7	.375	.750	.644	.334	.177	.090	.148 #6 T.H.	10
TPR-MF6-1	8	.437	.875	.753	.322	.225	.114	.148 #6 T.H.	15
TPR-MF8	9	.531	1.062	.997	.408	.230	.125	.178 #8 T.H.	22
TPR-MF10	10	.625	1.250	1.174	.475	.328	.140	.215 #10 T.H.	32
TPR-F4	11	.370	.553	.449	.207	.187	.062	.108 #4 R.H.	4
TPR-F6	12	.437	.750	.628	.272	.237	.085	.148 #6 R.H.	9
TPR-F8	13	.625	.932	.844	.359	.327	.110	.178 #8 R.H.	16
TPR-F10	14	.875	1.125	1.035	.525	.392	.125	.211 #10 T.H.	25
TPR-F10-1	15	1.125	1.250	1.132	.550	.636	.138	.211 #10 T.H.	30
TPR-L6	16	.703	1.010	.760	N/A	N/A	.078	.150 #6 R.H.	9





Actual Sizes



ISO 9001:2000 Certified
CERTIFICATE # 08-511

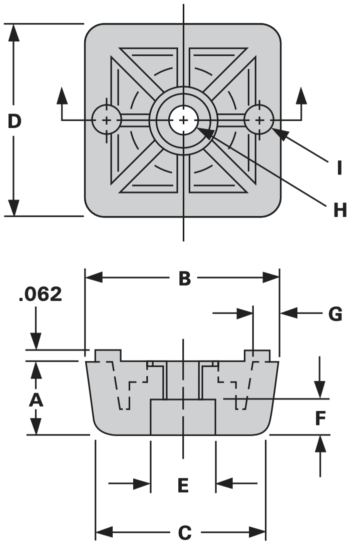
Square Thermoplastic Rubber Feet with Steel Support Bushing

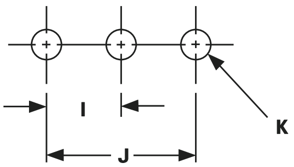
PART NUMBER	KEY NO.	Height A	Width B & D	Width C	Recess Dia. E	Recess Depth F	Outer Wall G	Insert I.D. & Screw Size H	Lug Dia. I	*Weight Capacity (per foot)
TPR-SQF6T	1	.344	.890	.794	.333	.142	.095	.148 #6 Truss Head	.150	TBD
TPR-SQF6-1	2	.390	1.000	.890	.333	.187	.125	.148 #6 Truss Head	.150	TBD
TPR-SQF8T	3	.460	1.187	1.059	.409	.168	.145	.178 #8 Truss Head	.180	TBD
TPR-SQF10T	4	.522	1.375	1.229	.472	.202	.172	.215 #10 Truss Head	.210	TBD
TPR-SQF10-1	5	.590	1.500	1.336	.472	.275	.190	.215 #10 Truss Head	.210	TBD

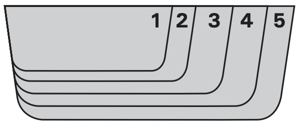
PART NUMBER	MOUNTING HOLES ±.008 I	±.005 J	+ .004 - .000 K
TPR-SQF6T	.328	.656	.154 (#23 Drill)
TPR-SQF6-1	.390	.781	.154 (#23 Drill)
TPR-SQF8T	.453	.906	.185 (#13 Drill)
TPR-SQF10T	.531	1.062	.219 (7/32 Drill)
TPR-SQF10-1	.593	1.187	.219 (7/32 Drill)

- Molded from “Thermoplastic Rubber” Cabinet Feet provide good traction, excellent shock absorbing qualities and unlike natural rubber they have good non-marking qualities and outstanding resistance to stress cracking. A Trivalent Chromate plated steel Support Bushing absorbs the total fastener load allowing the foot to be mounted using a variety of screws or rivets without causing distortion to the foot itself. Excellent resistance to ozone, aging and most chemicals. Available in any color on special order.

- **Stock Material:** Monsanto Santoprene (87 shore A)
- **Stock Colors:** Black or Medium Gray
- **RoHS:** Parts are RoHS Compliant.







Actual Sizes

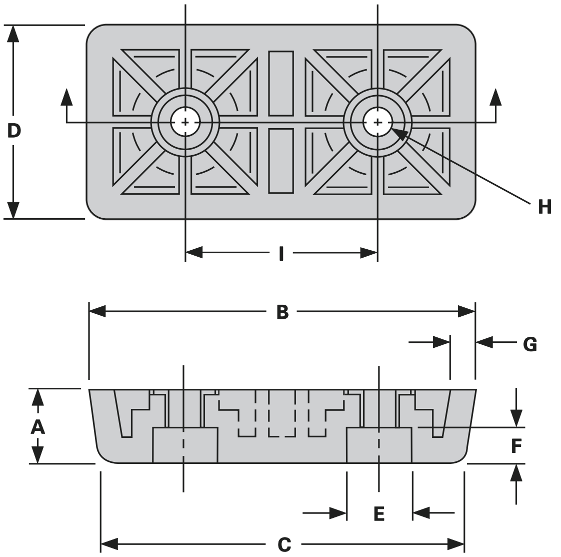
ISO 9001:2000 Certified
CERTIFICATE # 08-511

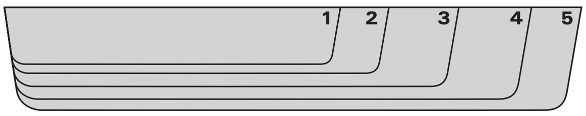
Rectangular Thermoplastic Rubber Feet with Steel Support Bushing

- Molded from “Thermoplastic Rubber” Cabinet Feet provide good traction, excellent shock absorbing qualities and unlike natural rubber they have good non-marking qualities and outstanding resistance to stress cracking. A Trivalent Chromate plated steel Support Bushing absorbs the total fastener load allowing the foot to be mounted using a variety of screws or rivets without causing distortion to the foot itself. Excellent resistance to ozone, aging and most chemicals. Available in any color on special order.

- **Stock Material:** Monsanto Santoprene (87 shore A)
- **Stock Colors:** Black or Medium Gray
- **RoHS:** Parts are RoHS Compliant.

PART NUMBER	KEY NO.	Height A	Length B	Length C	Width D	Recess Dia. E	Recess Depth F	Outer Wall G	Insert I.D. & Screw Size H	Lug Dia. I	*Weight Capacity (per foot)
TPR-RF6T	1	.344	1.768	1.672	.885	.333	.142	.095	.148 #6 Truss Head	.875	TBD
TPR-RF6-1	2	.390	2.022	1.912	1.005	.333	.187	.125	.148 #6 Truss Head	1.000	TBD
TPR-RF8T	3	.465	2.380	2.250	1.187	.409	.176	.142	.178 #8 Truss Head	1.187	TBD
TPR-RF10T	4	.528	2.777	2.629	1.375	.472	.202	.172	.215 #10 Truss Head	1.375	TBD
TPR-RF10-1	5	.590	3.000	2.834	1.510	.472	.280	.190	.215 #10 Truss Head	1.500	TBD





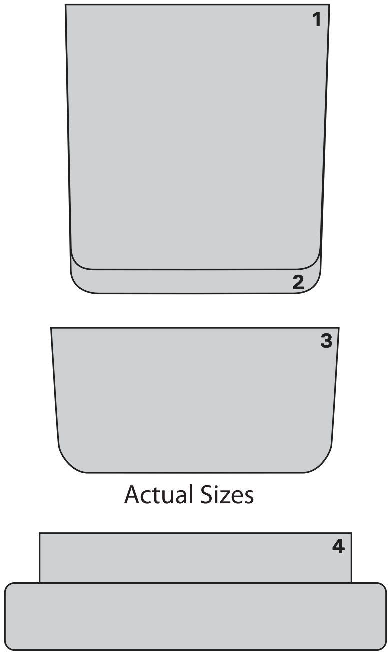
Actual Sizes

Miscellaneous Thermoplastic Rubber Feet

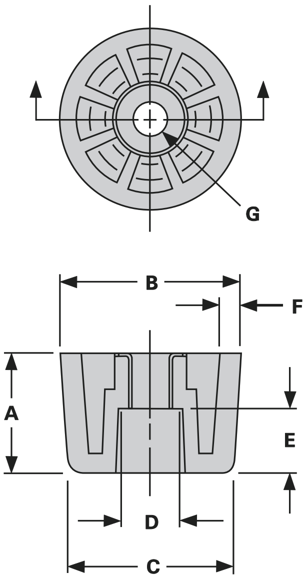
PART NUMBER	KEY NO.	Height A	Dia. B	Dia. C	Recess Dia. D	Recess Depth E	Outer Wall	Insert I.D. & Screw Size T.H (Truss Head)	*Weight Capacity (per foot)
TPR-F-060	1	1.375	1.375	1.303	.594	.890	.150	.211 #10 Truss Head	TBD
TPR-F-063	2	1.500	1.375	1.297	.594	1.015	.150	.211 #10 Truss Head	TBD
TPR-MF10-2	3	.750	1.500	1.395	.468	.458	.168	.215 #10 Truss Head	TBD
TPR-F-061	4	.600	N/A	N/A	.413	.288	N/A	.215 #10 Truss Head	TBD

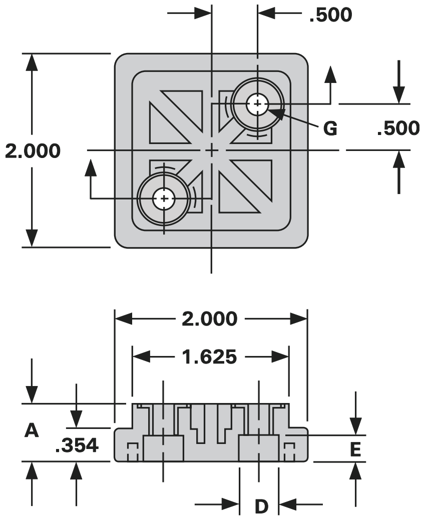
- Molded from “Thermoplastic Rubber” Cabinet Feet provide good traction, excellent shock absorbing qualities and unlike natural rubber they have good non-marking qualities and outstanding resistance to stress cracking. A Trivalent Chromate plated steel Support Bushing absorbs the total fastener load allowing the foot to be mounted using a variety of screws or rivets without causing distortion to the foot itself. Excellent resistance to ozone, aging and most chemicals. Available in any color on special order.

- **Stock Material:** Monsanto Santoprene (87 shore A)
- **Stock Colors:** Black or Medium Gray
- **RoHS:** Parts are RoHS Compliant.



Actual Sizes





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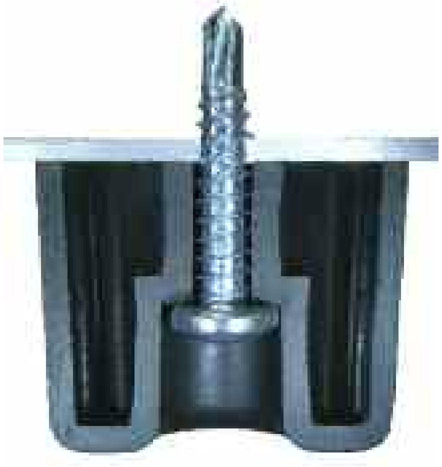
CERTIFICATE # 08-511

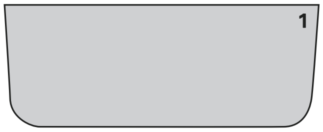
Round Polyethylene (PE) Feet

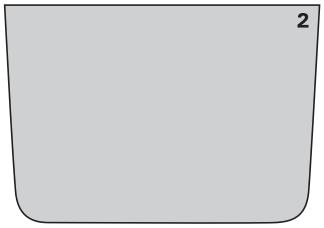
- Estco Polyethylene feet provide an economical alternative to our Thermoplastic Rubber feet. Recommended where resistance to sliding and shock absorbing or other rubber like qualities are not a requirement. Excellent impact resistance and good stress crack resistance. Excellent resistance to aging and most chemicals. Available in any color on special order.

- **Stock Material:** Polyethylene (95 Shore A)
- **RoHS:** Compliant
- ***Exception:** P/N F10 1-5/8 x 2 x .150 (Key No. 5) is molded from 20 percent Calcium Carbonate filled Polypropylene.

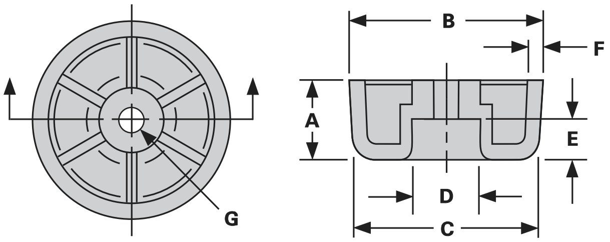
PART NUMBER	KEY NO.	Height A	Dia. B	Dia. C	Recess Dia. D	Recess Depth E	Outer Wall	Insert I.D. & Screw Size T.H (Truss Head)	*Weight Capacity (per foot)
TPR-ESF10-1	1	.648	1.621	1.553	.518	.336	.130	.202 #10 Truss Head	TBD
TPR-EMF10-1	2	1.135	1.621	1.503	.518	.823	.130	.202 #10 Truss Head	TBD
TPR-ETF10-1	3	1.621	1.621	1.451	.518	1.309	.130	.202 #10 Truss Head	TBD
TPR-F10 1-5/8 x 2 x .100	4	2.000	1.625	1.485	.478	1.250	.130	.202 #10 Truss Head	TBD
TPR-F10 1-5/8 x 2 x .150	5	2.000	1.625	1.485	.478	.813	.150	.202 #10 Truss Head	TBD

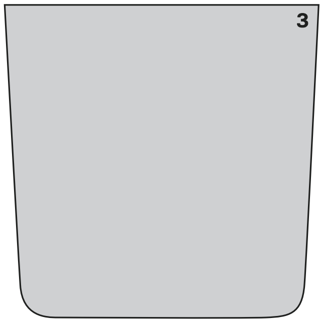


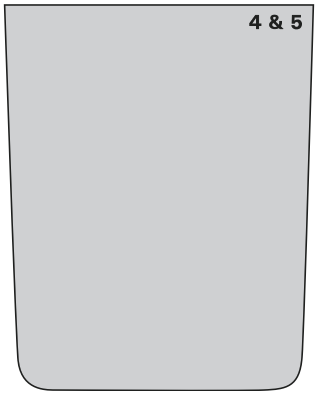




Actual Sizes







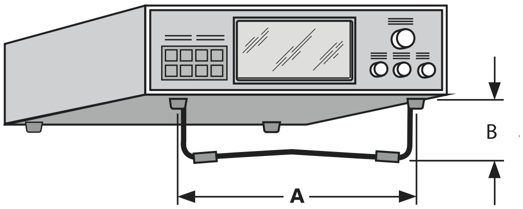
Collapsible Tilt Stands

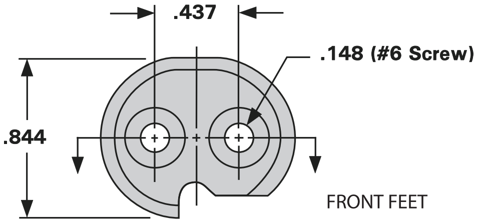
PART NUMBER	FEET MOUNTING CENTERS A	Height A
TPR-CTS 3	3	2
TPR-CTS 5-1/2	5-1/2	1-1/2
TPR-CTS 5-1/2	5-1/2	2-1/2
TPR-CTS 7	7	2
TPR-CTS 7	7	2-1/2
TPR-CTS 7	7	3
TPR-CTS 10	10	2-1/2
TPR-CTS 10	10	3
TPR-CTS 11-1/4	11-1/4	3
TPR-CTS 12	12	2-1/2
TPR-CTS 15-1/2	15-1/2	2-1/2

- Set consists of four low-profile molded feet and steel tilt stand. The tilt stand snaps into the upright position, and when not in use, the tilt stand folds flat against cabinet base for transportation, storage or stacking. Skid resistant rear feet help keep instrument in place without marking surface.

Collapsible Tilt Stand includes:

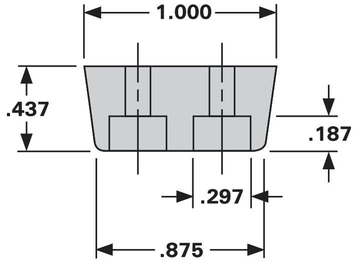
- (2) Front feet, black nylon (F-034-N-B, R & L Foot)
- (2) Rear feet, black thermoplastic rubber (MF6-1T)
- (1) Tilt stand, steel with black epoxy finish and two Neoprene rubber bumpers.
- **RoHS:** Compliant

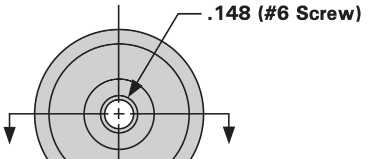




FRONT FEET

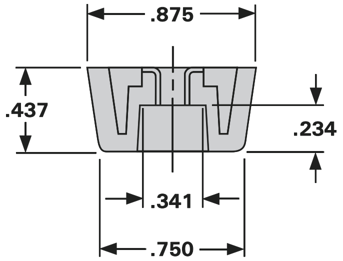
Actual Size





REAR FEET

Actual Size



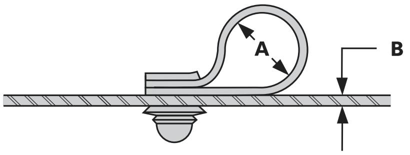
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Cable Straps

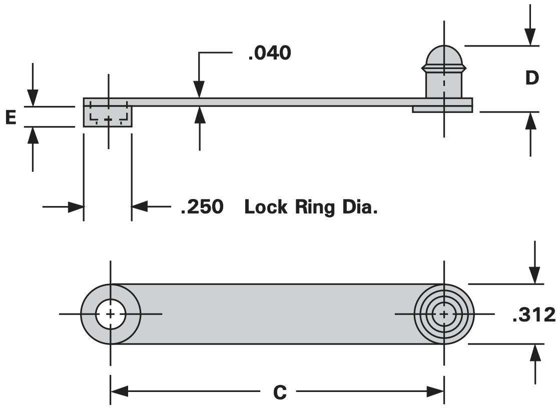
- Designed as a quick and efficient method for attaching small wire bundles, cable, tubing, etc. to sheet metal. Simply snap the ring end into the specified diameter hole, position wiring, fold strap over and lock in place.

- **Stock Material:** Ethylene-Vinyl Acetate Copolymer
- **Stock Colors:** Medium Gray
- **RoHS:** Compliant

PART NUMBER	LOOP DIAMETER A	MAXIMUM MATERIAL THICKNESS B	LENGTH BETWEEN CENTERS C	HEAD HEIGHT D	LOCK RING HEIGHT E
TPR-4-4-1	1/4	.062	1-1/4	.344	.105
TPR-4-7-1	3/8	.062	1-3/4	.344	.105
TPR-4-10-1	9/16	.062	2-3/8	.344	.105
TPR-4-10-2	9/16	.093	2-3/8	.375	.136



4-7-1 Actual Size



VIBRATION AND SHOCK MOUNTS

Series 300 Cylindrical Mountings
12-1 – 12-17

Series 540 Rectangular Mountings
12-18

Series 600 Heavy-Duty Center-Bolt Safety Mountings
12-19 – 12-23

Series 1000 Custom Molded Mounting Feet
12-24

Series 5000 Bonded Bushing and Snubber
12-25

Series 9000 Cylindrical Mounting Pads
12-26, 12-27, 12-28

ESTCO
Vibration and Shock Mounts

SERIES 300
CYLINDRICAL MOUNTINGS

Styles: **MM300/317**

For loads to 79 pounds in compression; 40 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		850	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	33				29	21	16	12.5	10.5	7.0	5.0
B	40				39.5	28.5	21.5	17.0	14.0	9.5	7.0
C	60					49	37	29.5	24.0	17.0	11.5
D	79					72.5	55	43.5	36	24.5	17.0

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		850	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	18	16.0	9.3	7.2	5.0	3.8	2.8	2.3	1.8	1.2	*
B	21		13.0	10.2	7.0	5.3	4.0	3.2	2.6	1.8	*
C	34		24.5	20	14.7	11.2	9.0	7.5	6.2	4.5	3.5
D	40		32	26	19.0	14.8	12.0	10.0	8.3	6.0	5.0

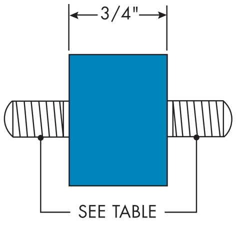
* At these forcing frequencies lesser loads will yield 81% isolation.

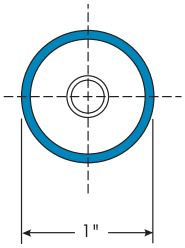
DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
1/4 - 20	1/4	1/4 - 20	1/4	52
1/4 - 20	1/2	1/4 - 20	*	59
1/4 - 20	1/2	1/4 - 20	13/32	57
1/4 - 20	1/2	1/4 - 20	1/2	• 58
1/4 - 20	1/2	1/4 - 20	5/8	43
1/4 - 20	1/2	1/4 - 20	3/4	45
1/4 - 20	1/2	1/4 - 20	1	55
1/4 - 20	5/8	1/4 - 20	5/8	42
5/16 - 18	9/16	5/16 - 18	9/16	• 76

(Style #317)

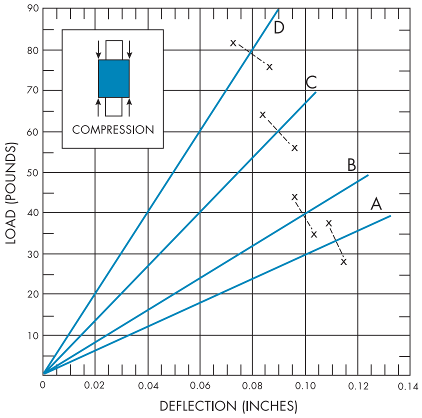
• standard stud * tapped hole

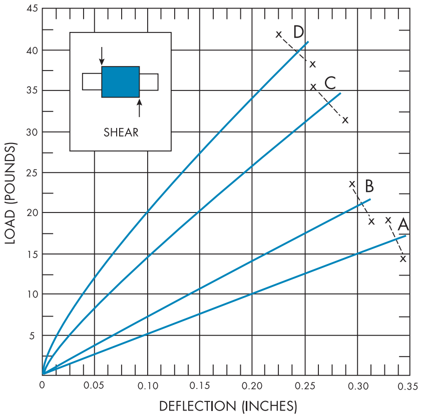




LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300

CYLINDRICAL MOUNTINGS

Style: MM301

For loads to 25 pounds in compression; 12.5 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		1100	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	8					6.2	4.8	4.0	3.2	2.7	2.0
B	12					10.2	8.0	6.5	5.4	4.5	3.2
C	16							14.0	11.6	9.6	6.8
D	25							22.0	18.2	15.2	10.4

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		1100	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	4.4	4.0	3.1	2.2	1.7	1.3	*	*	*	*	*
B	6.7	6.5	5.2	3.7	2.8	2.3	1.8	*	*	*	*
C	9.0		9.0	6.3	4.6	3.6	2.9	2.3	1.9	*	*
D	12.5			11.2	8.2	6.3	5.1	4.0	3.3	2.8	2.0

* At these forcing frequencies lesser loads will yield 81% isolation.

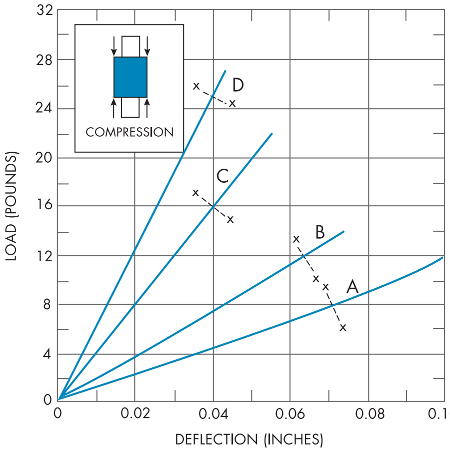
DIMENSIONS

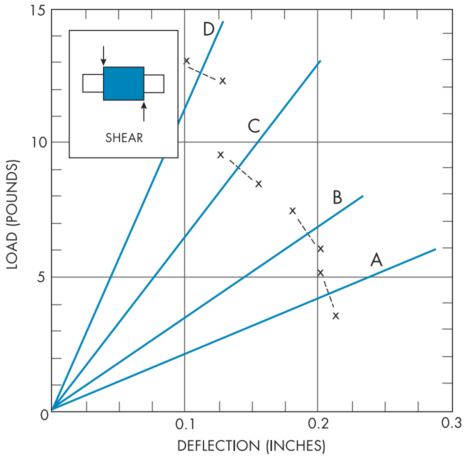
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
8-32	1/4	8-32	*	19
8-32	1/4	8-32	1/4	12
8-32	1/4	8-32	3/8	15
8-32	3/8	8-32	*	13
8-32	3/8	8-32	3/8	• 10

• standard stud   * tapped hole

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





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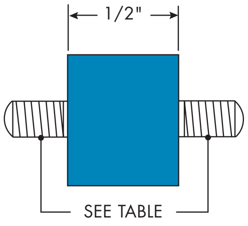
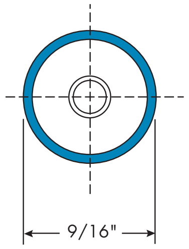




ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS
Style: MM302

For loads to 13.3 pounds in compression; 6.4 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

SELECTION GUIDE

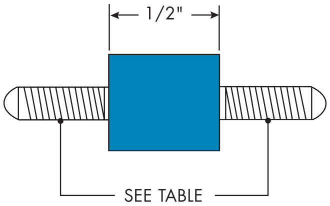
COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
		FORCING FREQUENCY IN CYCLES PER MINUTE									
LOAD RATING	MAXIMUM LOAD (LBS)	1000	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	4.9					3.9	3.0	2.4	2.0	1.8	1.0
B	6.4					5.3	4.2	3.4	2.9	2.5	1.5
C	10.4					9.8	7.7	6.3	5.2	4.3	2.6
D	13.3					13.1	10.4	8.5	7.0	5.8	4.2

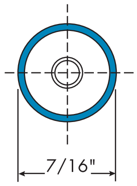
SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
		FORCING FREQUENCY IN CYCLES PER MINUTE									
LOAD RATING	MAXIMUM LOAD (LBS)	1000	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	2.7	2.6	1.7	1.2	1.0	.7	.5	*	*	*	*
B	3.6		2.6	1.9	1.4	1.1	.8	.7	.6	*	*
C	5.6		4.7	3.2	2.5	1.9	1.5	1.3	1.1	.9	.7
D	6.4		6.1	4.4	3.4	2.7	2.2	1.8	1.6	1.4	1.0

* At these forcing frequencies lesser loads will yield 81% isolation.

DIMENSIONS

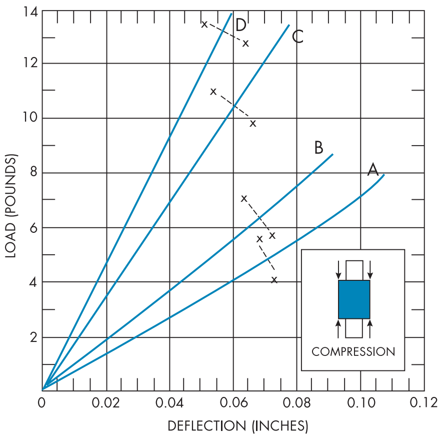
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
8-32	3/8	8-32	3/8	20

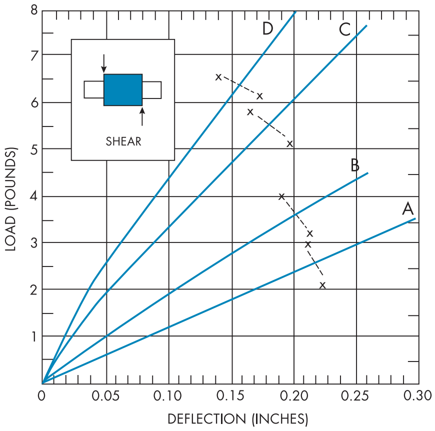




LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300

CYLINDRICAL MOUNTINGS

Style: MM304

For loads to 75 pounds in compression; 42 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		850	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	24				29	21	16	12.5	10.5	7.0	5.0
B	32				39.5	28.5	21.5	17.0	14.0	9.5	7.0
C	38					49	37	29.5	24.0	17.0	11.5
D	45					72.5	55	43.5	36	24.5	17.0

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		850	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	9	16.0	9.3	7.2	5.0	3.8	2.8	2.3	1.8	1.2	*
B	14		13.0	10.2	7.0	5.3	4.0	3.2	2.6	1.8	*
C	18		24.5	20	14.7	11.2	9.0	7.5	6.2	4.5	3.5
D	21		32	26	19.0	14.8	12.0	10.0	8.3	6.0	5.0

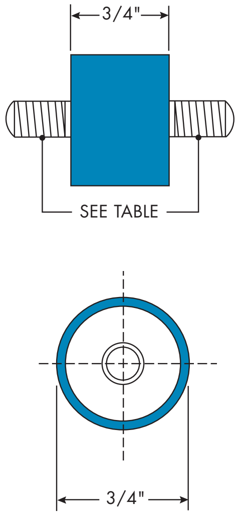
* At these forcing frequencies lesser loads will yield 81% isolation.

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

DIMENSIONS

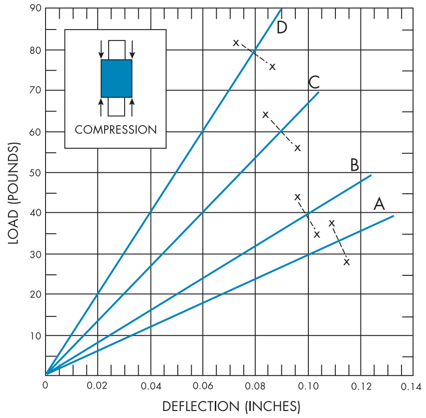
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
1/4 - 20	1/4	1/4 - 20	1/4	52
1/4 - 20	1/2	1/4 - 20	*	59
1/4 - 20	1/2	1/4 - 20	13/32	57
1/4 - 20	1/2	1/4 - 20	1/2	• 58
1/4 - 20	1/2	1/4 - 20	5/8	43
1/4 - 20	1/2	1/4 - 20	3/4	45
1/4 - 20	1/2	1/4 - 20	1	55
1/4 - 20	5/8	1/4 - 20	5/8	42

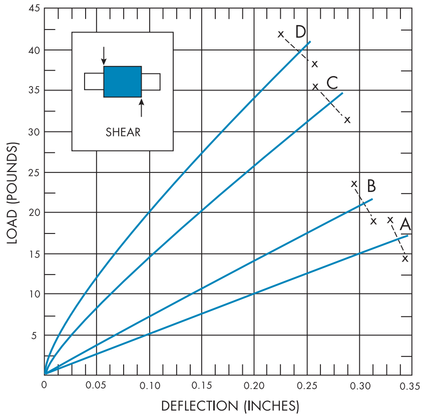
• standard stud * tapped hole



LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS

Style: MM305

For loads to 75 pounds in compression; 42 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		1100	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	40					30.5	24.0	19.5	16.0	13.5	10.0
B	43					38	30	24.8	20.5	17.5	12.5
C	74					74	58.5	47.5	39.5	33	23.5
D	75						67.5	55.5	45.5	38.5	27.5

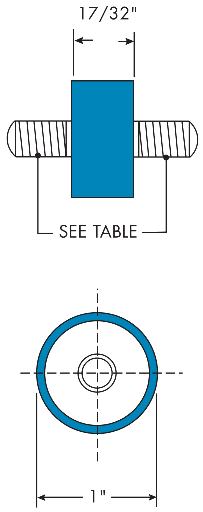
SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		1100	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	19	15.7	12.5	8.3	6.3	*	*	*	*	*	*
B	21	19.0	15.5	10.6	8.0	6.3	5.0	*	*	*	*
C	37		31.5	22.5	17.0	14	11.5	9.5	*	*	*
D	42		40	29.2	22.0	18.5	15.8	13	11.0	9.5	*

* At these forcing frequencies lesser loads will yield 81% isolation.

DIMENSIONS

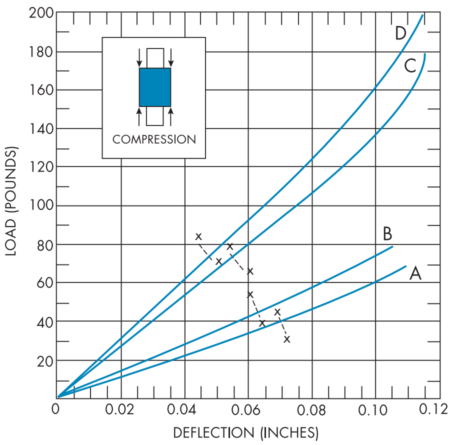
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
10-24	3/8	10-24	3/8	32
10-24	3/8	10-24	1/2	33
10-24	1/2	10-24	1/2	34
1/4 - 20	1/2	1/4 - 20	1/2	• 58
1/4 - 20	1/2	1/4 - 20	5/8	43
1/4 - 20	1/2	1/4 - 20	3/4	45
1/4 - 20	3/4	1/4 - 20	3/4	46

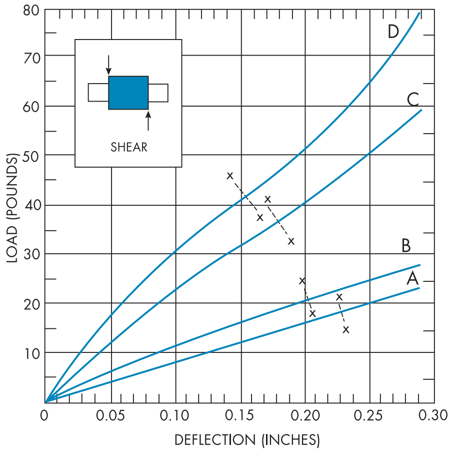
• standard stud



LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS

Style: MM307

For loads to 28.5 pounds in compression; 11.9 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)						
		FORCING FREQUENCY IN CYCLES PER MINUTE						
LOAD RATING	MAXIMUM LOAD (LBS)	1500	1750	2000	2250	2500	3000	3600
A	22.0				21.5	16.5	10.5	6.5
B	28.5					25.5	17.0	12.0

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)						
		FORCING FREQUENCY IN CYCLES PER MINUTE						
LOAD RATING	MAXIMUM LOAD (LBS)	1500	1750	2000	2250	2500	3000	3600
A	8.4	6.2	4.7	3.7	3.0	2.4	*	*
B	11.9	9.9	7.3	5.6	4.4	3.6	2.5	*

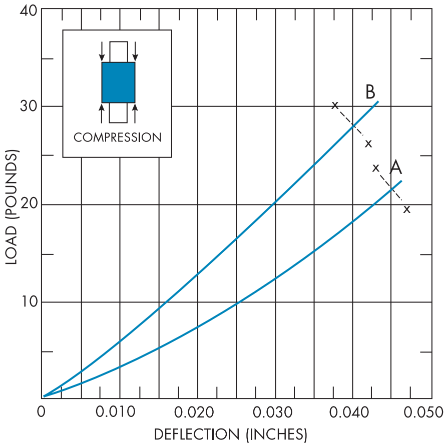
* At these forcing frequencies lesser loads will yield 81% isolation.

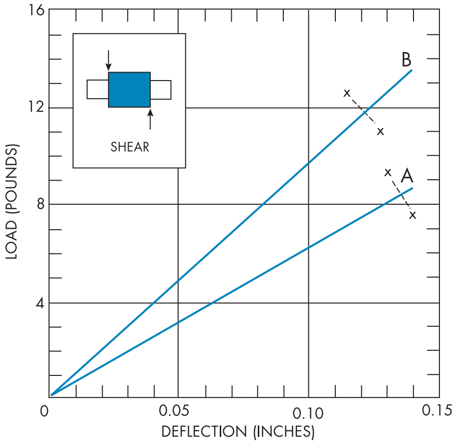
DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
1/4-20	.410	1/4 - 20	.410	60

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





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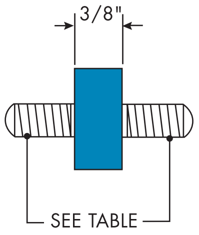
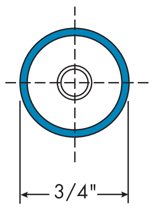




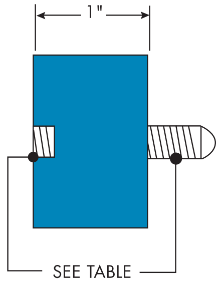
ISO 9001:2000 Certified
CERTIFICATE # 08-511

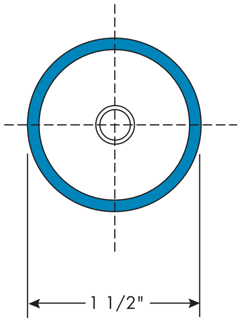
SERIES 300
CYLINDRICAL MOUNTINGS

Style: MM308

For loads to 210 pounds in compression; not recommended for static loads in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.





SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)						
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE						
		1150	1250	1500	1750	2000	2750	3500
A	95	95	80	55	40	30	15	
B	135		125	85	60	45	22	
C	185			140	100	75	40	25
D	210			185	135	105	55	35

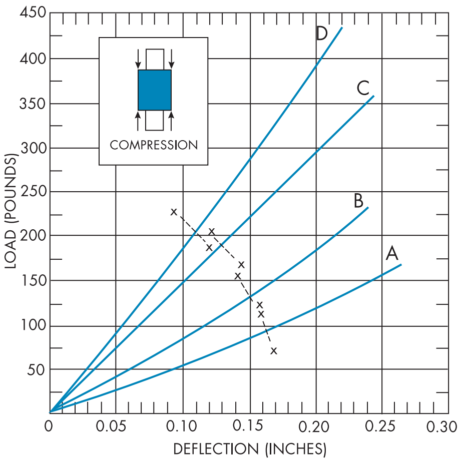
DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
5/16 - 18	9/16	5/16 - 18	*	• 87
5/16 - 18	7/8	5/16 - 18	*	85

* tapped hole • standard stud

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads



GENERAL INFORMATION

Compression:

When specified as a direction for loading a rubber pad - A deformation caused by squeezing the layers of the object in a direction perpendicular to the layers.

Shear:

When specified as a direction for loading a rubber pad - A deformation caused by sliding layers of an object past each-other in a direction parallel to the layers.

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Engineering Solutions through Quality Products, since 1970.

ENTERPRISES, INC.

SERIES 300

CYLINDRICAL MOUNTINGS

Style: MM310

For loads to 120 pounds in compression; 63 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		700	850	950	1100	1250	1500	1750	2000	2500	3000
A	41				34.5	27.5	19	14	10	7	
B	64					48	32	24	17.5	12	8.5
C	90					80	55	41.5	30	20	14
D	120						89	70.5	53	38.5	26.5

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		700	850	950	1100	1250	1500	1750	2000	2500	3000
A	21	20	11.0	8.5	6.7	5.5	*	*	*	*	*
B	31		18	14	10.5	8	5.5	*	*	*	*
C	48		31.5	25	19.5	15.5	11	8.5	*	*	*
D	63		50	41	32.6	27.5	20.5	16	14	8	*

* At these forcing frequencies lesser loads will yield 81% isolation.

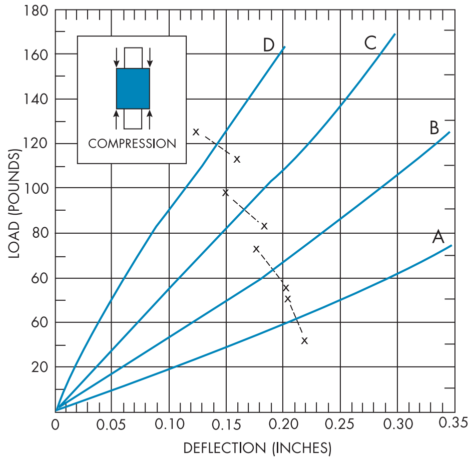
DIMENSIONS

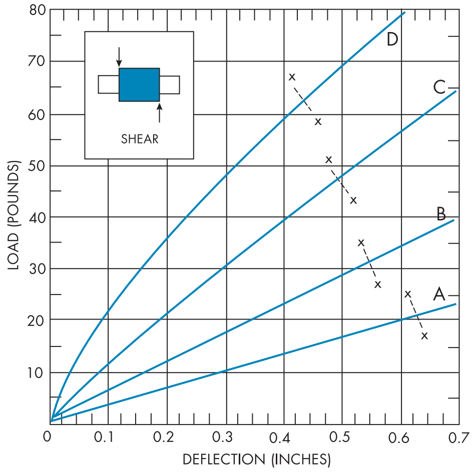
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
5/16 - 18	1/2	5/16 - 18	1/2	68
5/16 - 18	9/16	5/16 - 18	9/16	• 76
5/16 - 18	9/16	5/16 - 18	3/4	75
5/16 - 18	3/4	5/16 - 18	3/4	70
5/16 - 18	7/8	5/16 - 18	7/8	80

• standard stud

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





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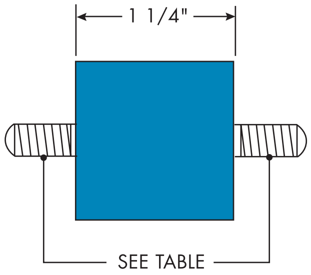

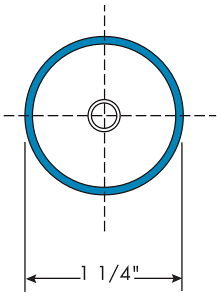

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CERTIFICATE # 08-511

SERIES 300

CYLINDRICAL MOUNTINGS

Style: MM311

For loads to 105 pounds in compression; 66 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		700	850	1100	1250	1500	1750	2000	2250	2500	3000
A	47				44.5	30	22	18	13.5	11	
B	74				72.5	48.5	35.5	27	21	17.5	12.5
C	96					75.7	55.5	43	34	28	19.5
D	105					100	73	56.5	45	38	25.5

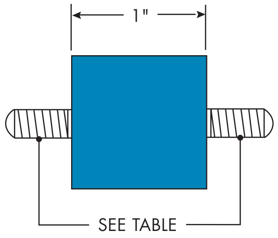
SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		700	850	1100	1250	1500	1750	2000	2250	2500	3000
A	27	27	19.5	11.5	9	6	*	*	*	*	*
B	41		31	19	14.5	10.5	8	*	*	*	*
C	66		53.5	33	26.5	19	14	11.5	9	*	*
D	66		61	38	30.5	22	19.5	13	10.5	8.5	*

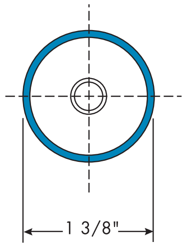
* At these forcing frequencies lesser loads will yield 81% isolation.

DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
5/16 - 18	1/2	5/16 - 18	7/8	71
5/16 - 18	9/16	5/16 - 18	9/16	• 76
5/16 - 18	9/16	5/16 - 18	3/4	75
5/16 - 18	3/4	5/16 - 18	3/4	70
5/16 - 18	7/8	5/16 - 18	7/8	80

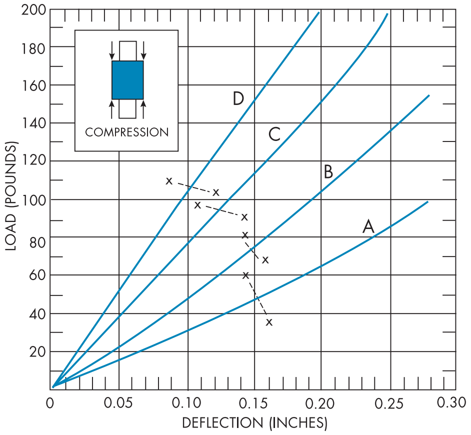
• standard stud

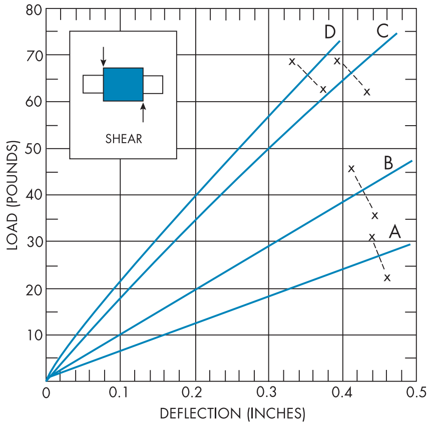




LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS

Style: **MM312**

For loads to 185 pounds in compression; 67 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		950	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	93					71	51	39	31	25	
B	118					106	81	64	52	43	35
C	158						121	96	79	65	54
D	185						164	131	109	90	74

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		950	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	36	34	25	19	13.5	10	*	*	*	*	*
B	46		38	30	21	16	12	9.5	*	*	*
C	57			50	35	26	20	16	13	*	*
D	67			66	46	34	26	21	18	14	*

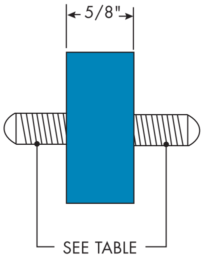
* At these forcing frequencies lesser loads will yield 81% isolation

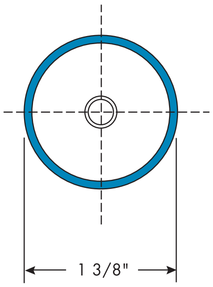
- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
5/16 - 18	1/2	5/16 - 18	1/2	68
5/16 - 18	1/2	5/16 - 18	3/4	69
5/16 - 18	9/16	5/16 - 18	9/16	• 76
5/16 - 18	5/8	5/16 - 18	5/8	72

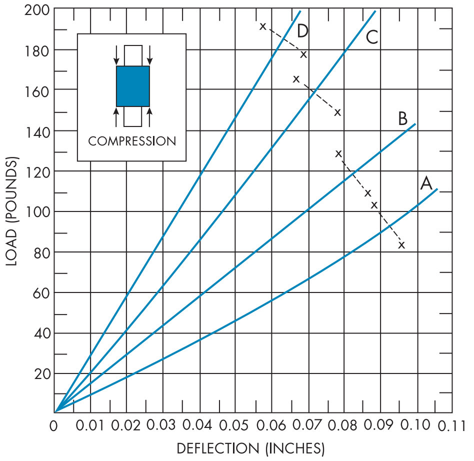
• standard stud

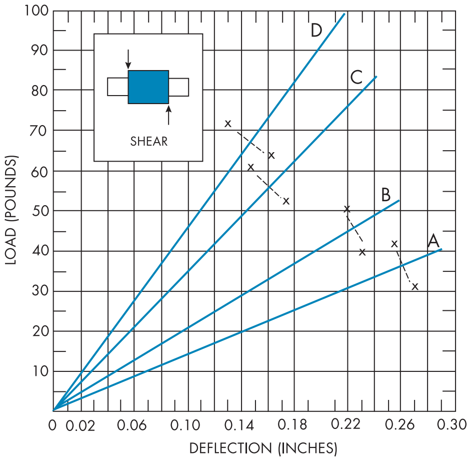




LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

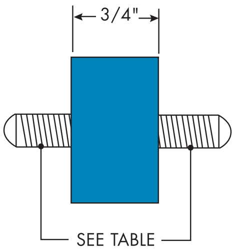
SERIES 300

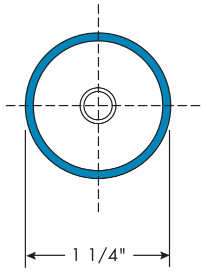
CYLINDRICAL MOUNTINGS

Style: MM314

For loads to 142 pounds in compression; 64 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.





SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		950	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	56				50	38	28.5	22.5	18	12.5	
B	73				73	51	39	30.5	24.5	16.5	12
C	109					85	63.5	50	41	28	20
D	142					129	99	78	64	44	30

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		950	1100	1250	1500	1750	2000	2250	2500	3000	3600
A	32	23	18	14.5	10	7.5	*	*	*	*	*
B	38	32	24.5	19	13	9.5	7	*	*	*	*
C	51		44.5	36	26	19.5	14	12	10	*	*
D	64		58	46.5	34	27	20.5	17	14	9.5	*

* At these forcing frequencies lesser loads will yield 81% isolation.

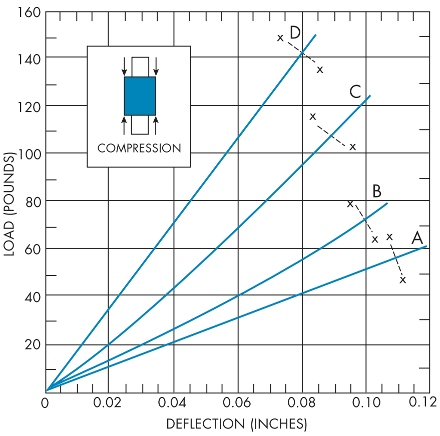
DIMENSIONS

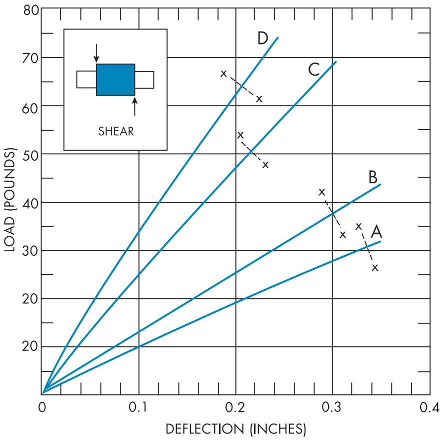
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
5/16 - 18	1/2	5/16 - 18	1/2	68
5/16 - 18	1/2	5/16 - 18	3/4	69
5/16 - 18	9/16	5/16 - 18	9/16	• 76
5/16 - 18	9/16	5/16 - 18	3/4	75
5/16 - 18	3/4	5/16 - 18	3/4	70

• standard stud

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads;
data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS

Style: MM315

For loads to 123 pounds in compression; 63 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
		FORCING FREQUENCY IN CYCLES PER MINUTE									
LOAD RATING	MAXIMUM LOAD (LBS)	750	850	950	1100	1250	1500	1750	2000	2500	3000
A	56						40	28	21	13	
B	82						68.5	50	35	23	17
C	115						107	77.5	57	27.5	22
D	123							92	67.5	43	32

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
		FORCING FREQUENCY IN CYCLES PER MINUTE									
LOAD RATING	MAXIMUM LOAD (LBS)	750	850	950	1100	1250	1500	1750	2000	2500	3000
A	32	31	24	19	14	11	8	5.6	*	*	*
B	37		32	26	19	15	10	7.6	5.7	*	*
C	48		45	38	29	24	17	13	10	6.5	*
D	63			56	45	38	27	21	17	11	8

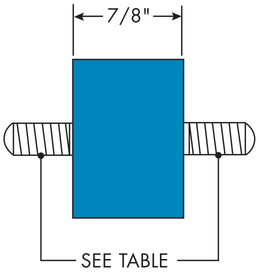
* At these forcing frequencies lesser loads will yield 81% isolation

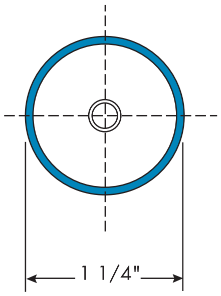
- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
5/16 - 18	1/2	5/16 - 18	3/4	69
5/16 - 18	1/2	5/16 - 18	7/8	71
5/16 - 18	9/16	5/16 - 18	9/16	• 76
5/16 - 18	5/8	5/16 - 18	5/8	72
5/16 - 18	3/4	5/16 - 18	3/4	70

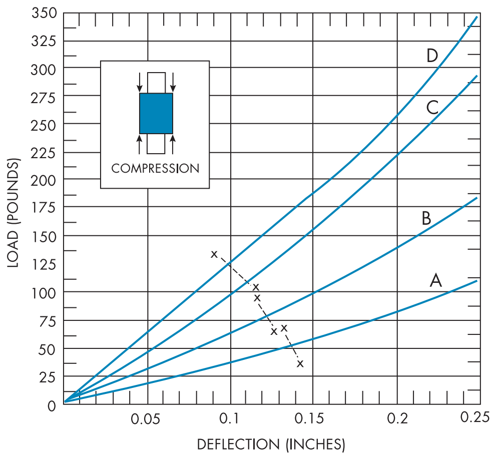
• standard stud

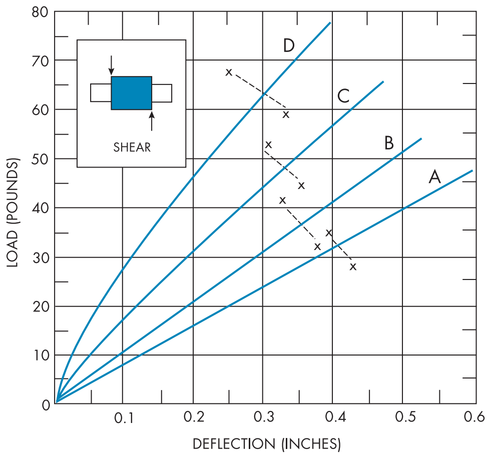




LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS
Styles: MM316/319
For loads to 86 pounds in compression; 43 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		700	950	1100	1250	1500	1750	2000	2250	2500	3000
A	37				35	24	18	13.5	11		
B	48					34	26	20.5	16	13	
C	57					46	32.5	26.5	20	16	
D	86					80	59	48	36	30	21

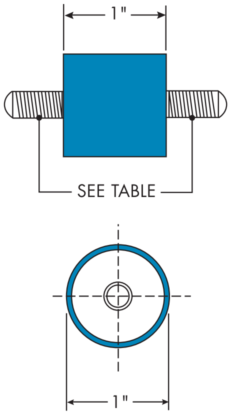
SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		700	950	1100	1250	1500	1750	2000	2250	2500	3000
A	16	16	8	6.5	5.0	3.5	*	*	*	*	*
B	21		12.5	9.5	7.5	5.5	4	*	*	*	*
C	35		23.5	18	14	10	7.5	6	*	*	*
D	43		32	24.5	19	13	9.5	7.5	*	*	*

* At these forcing frequencies lesser loads will yield 81% isolation.

DIMENSIONS

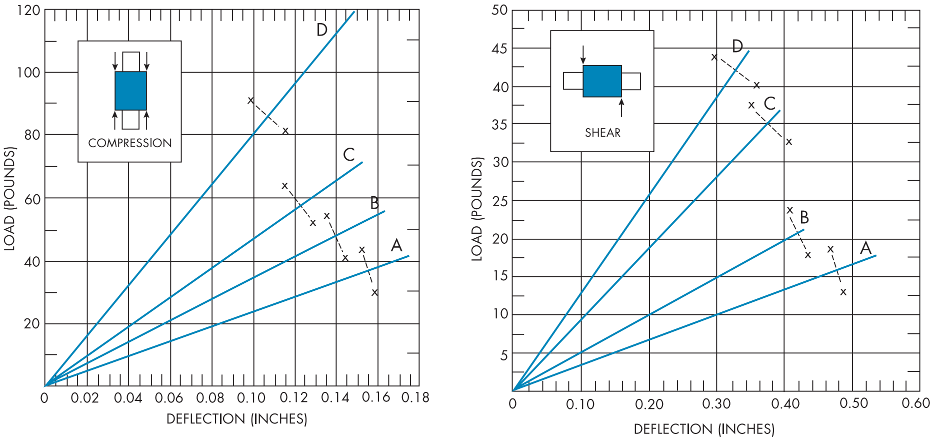
LEFT STUD (IN.)		RIGHT STUD (IN.)			
THREAD	LENGTH	THREAD	LENGTH	SUFFIX	
5/16 - 18	*	5/16 - 18	*	≈ 66	(style 319)
5/16 - 18	1/2	5/16 - 18	3/4	69	
5/16 - 18	9/16	5/16 - 18	9/16	• 76	
5/16 - 18	5/8	5/16 - 18	5/8	72	
5/16 - 18	3/4	5/16 - 18	3/4	70	

* tapped hole • standard stud ≈ style 319



LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads



IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300

CYLINDRICAL MOUNTINGS

Style: MM321

For loads to 13.8 pounds in compression; 7.1 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		1100	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	5.1				5.1	3.9	3.1	2.6	2.1	1.8	
B	6.4					5.5	4.3	3.4	2.8	2.4	1.8
C	11.1					11.0	8.7	7.1	6.0	5.1	3.8
D	13.8						12.3	10.3	8.9	7.7	5.9

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)									
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE									
		1100	1250	1500	1750	2000	2250	2500	2750	3000	3600
A	2.6	2.4	1.8	1.3	.9	.7	.6	*	*	*	*
B	3.6	3.4	2.8	1.9	1.4	1.0	.8	.7	.6	*	*
C	5.7		4.9	3.6	2.9	2.2	1.8	1.5	1.3	1.1	.9
D	7.1		7.0	5.1	3.9	3.1	2.6	2.1	1.8	1.6	1.2

* At these forcing frequencies lesser loads will yield 81% isolation

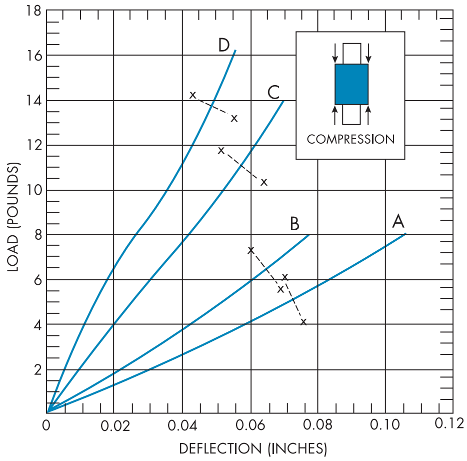
DIMENSIONS

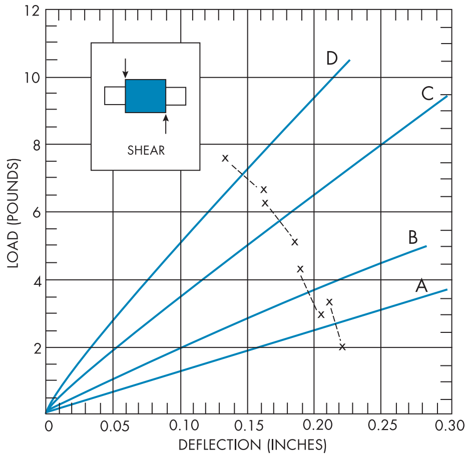
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
8-32	7/32	8-32	7/32	22
8-32	7/32	8-32	9/16	23
8-32	3/8	8-32	3/8	• 14
8-32	3/8	8-32	9/16	21
8-32	9/16	8-32	9/16	26

• standard stud

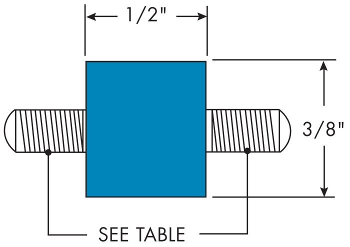
LOAD DEFLECTION GRAPH

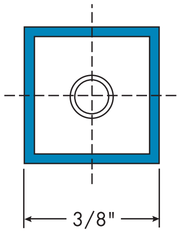
Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS
Style: MM322

For loads to 15.4 pounds in compression; 9.9 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)							
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE							
		1500	1750	2000	2250	2500	2750	3000	3600
A	6.6						5.4	4.5	3.2
B	8.7						8.5	6.9	4.8
C	12.0							11.5	8.0
D	15.4								11.8

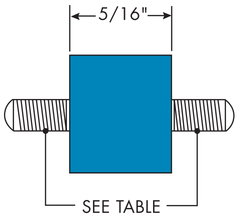
SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)							
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE							
		1500	1750	2000	2250	2500	2750	3000	3600
A	4.4	3.3	2.4	1.9	1.5	1.3	1.1	*	*
B	5.6	4.8	3.6	2.8	2.2	1.9	1.6	*	*
C	7.8	7.7	6.0	4.9	4.0	3.5	3.1	*	*
D	9.9		8.2	6.7	5.6	4.7	4.1	*	*

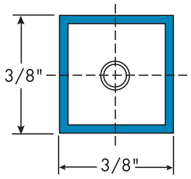
* At these forcing frequencies lesser loads will yield 81% isolation.

DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
8-32	7/32	8-32	7/32	• 22
8-32	7/32	8-32	9/16	23
8-32	3/8	8-32	3/8	14
8-32	3/8	8-32	9/16	21
8-32	9/16	8-32	9/16	26

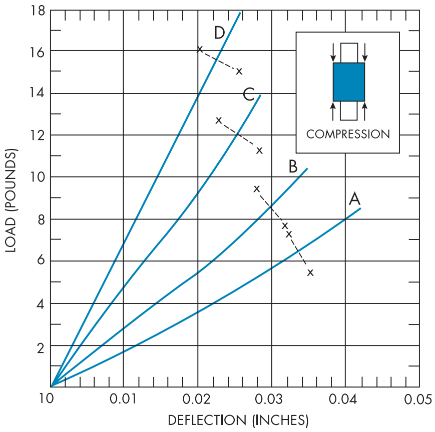
• standard stud

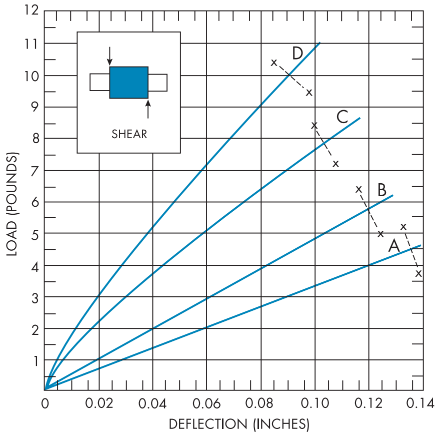




LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads;
data above that line are useful for calculating deflections under dynamic loads





ISO 9001:2000 Certified
CERTIFICATE # 08-511

SERIES 300
CYLINDRICAL MOUNTINGS

Style: MM323

For loads to 14.5 pounds in compression; 7.3 pounds in shear

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)							
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE							
		950	1100	250	1500	1750	2000	2250	2500
A	6.8					5.5	3.8	3.0	2.5
B	8.5					8.0	6.0	4.5	3.5
C	12.0						10.1	8.5	6.5
D	14.5						14.5	11.5	9.0

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)							
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE							
		950	1100	250	1500	1750	2000	2250	2500
A	2.8	2.8	2.2	1.6	1.1	.9	.7	*	*
B	3.3		2.8	2.1	1.6	1.2	.9	*	*
C	5.3		5.0	4.0	2.9	2.3	1.9	1.6	*
D	7.3			6.2	4.6	3.6	2.9	2.5	2.2

* At these forcing frequencies lesser loads will yield 81% isolation

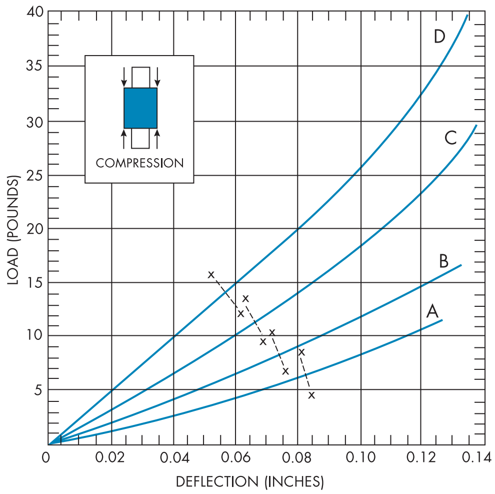
DIMENSIONS

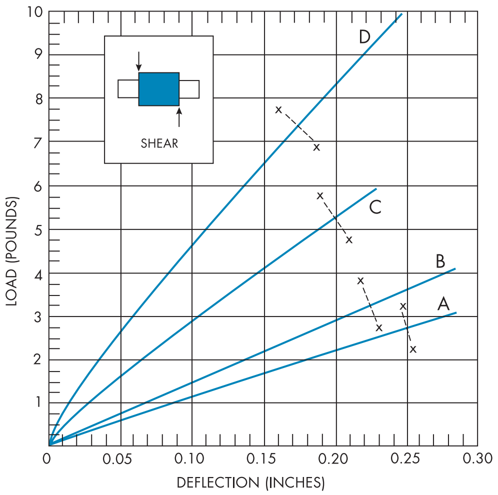
LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
8-32	3/8	8-32	3/8	14
8-32	3/8	8-32	3/8	17
8-32	9/16	8-32	9/16	• 28

• standard stud

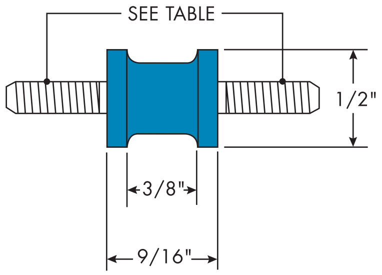
LOAD DEFLECTION GRAPH

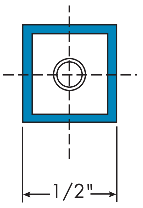
Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.





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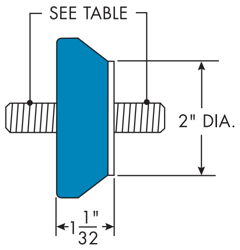
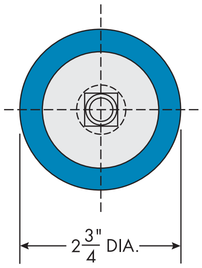
SERIES 300
CYLINDRICAL MOUNTINGS

Style: MM330

For loads to 330 pounds in compression; 140 pounds in shear

- The small, yet rugged design and the broad range of sizes make Estco cylindrical mountings ideal for a wide range of applications. They have been used on electric motors and generators, fans and blowers, relays and control panels, business machines timing devices and air handling equipment. Estco cylindrical mountings can be loaded in compression, in shear, or in combination compression and shear. Additional standard stud combinations have been added to the line to allow wider applications of these mountings to a customer's design requirements. All engineering data herein apply to mountings with a studded or tapped insert at each end. The maximum unthreaded portion of the stud does not exceed 1/16-inch.





SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)								
		FORCING FREQUENCY IN CYCLES PER MINUTE								
LOAD RATING	MAXIMUM LOAD (LBS)	700	850	1100	1250	1500	1750	2000	2250	2500
B	330					255	190	150	120	90

SHEAR		MINIMUM LOAD FOR 81% ISOLATION (LBS)								
		FORCING FREQUENCY IN CYCLES PER MINUTE								
LOAD RATING	MAXIMUM LOAD (LBS)	700	850	1100	1250	1500	1750	2000	2250	2500
B	140	140	105	65	52	38	32	*	*	*

* At these forcing frequencies lesser loads will yield 81% isolation.

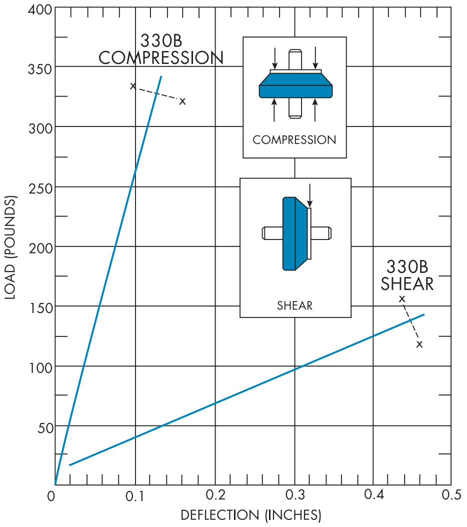
DIMENSIONS

LEFT STUD (IN.)		RIGHT STUD (IN.)		
THREAD	LENGTH	THREAD	LENGTH	SUFFIX
1/2 - 13	1 1/4	1/2 - 13	1 1/4	38
1/2 - 20	11/16	1/2 - 20	11/16	44
1/2 - 20	29/32	1/2 - 20	29/32	• 40

• standard stud

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads



Load ratings in the SELECTION GUIDE charts correspond to various durometers (or hardness) of the rubber formula used...

"A" corresponds to a 30 durometer;
"B" corresponds to a 40 durometer;
"C" corresponds to a 50 durometer;
"D" corresponds to a 60 durometer

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SERIES 540

RECTANGULAR MOUNTINGS

Style: **MM540**

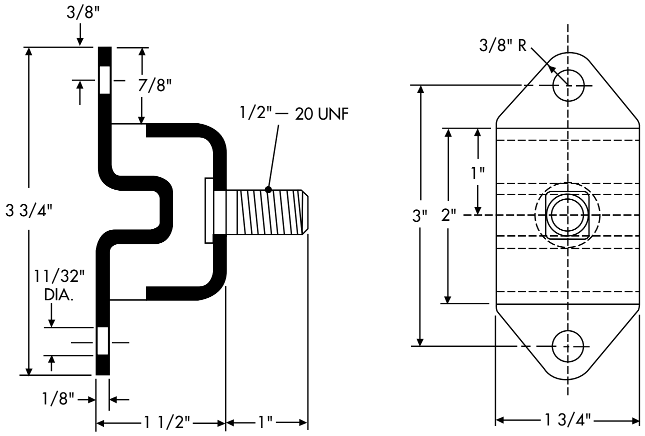
For loads to 320 pounds in compression; Not recommended for shear load applications

- These compact and rugged Estco rectangular mountings are built to support heavy machinery such as large blowers and compressors, engines, motors, presses and rock crushers. In addition to supporting loads in compression, they can isolate vibration occurring in a horizontal direction. Steel plates are chemically bonded to the top and bottom surfaces of the rubber to assure long operating life.

SELECTION GUIDE

COMPRESSION		MINIMUM LOAD FOR 81% ISOLATION (LBS)				
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE				
		2000	2250	2500	2750	3000
B	320	320	280	230	185	160

DIMENSIONS



LOAD DEFLECTION GRAPH

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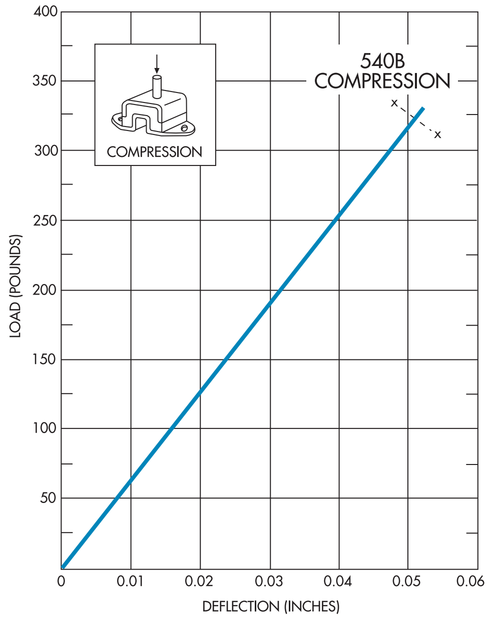

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SERIES 600

HEAVY-DUTY CENTER-BOLT SAFETY MOUNTINGS

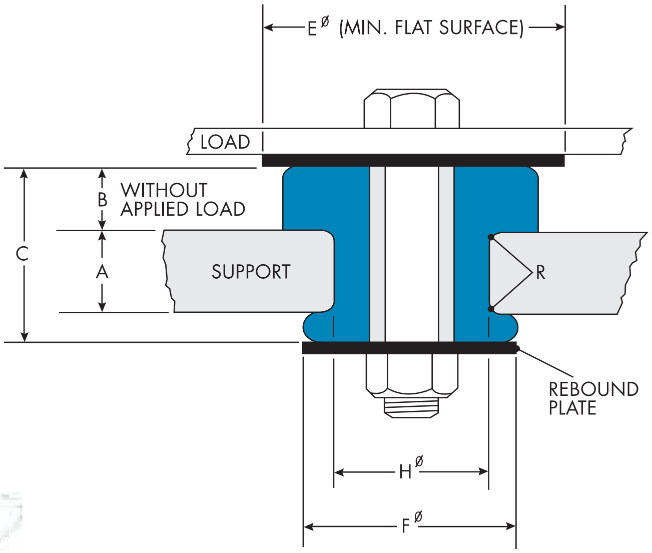
- This Estco Heavy-Duty Center-Bolt Safety Mounting Series is a versatile group of one-piece, low-deflection safety mountings designed for multidirectional isolation in heavy-duty applications. The mountings are rated by static load in the axial direction and dynamic loads up to three times the rated load can be handled. Although static loads in the radial direction are not recommended, dynamic radial loads are acceptable. The resilient element compressed during installation spreads at one end to form a self-contained rebound member. It features a bonded steel bushing that acts as a positive spacer. To install, lubricate the end of the mounting lightly with soapy water and, with an arbor press, push on the bushing to seat the mounting in the bore of the supporting member. Tightening the bolt until stopped by the integral spacer completes the installation.

SELECTION GUIDE

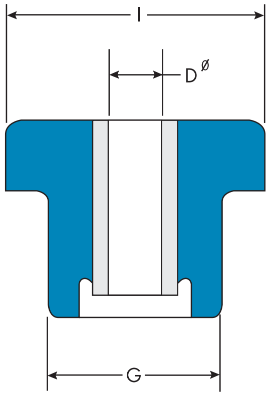
MOUNTING STYLE	LOAD RANGE (LBS)
620	20-140
630	50-520
640	100-720
641	100-720
645	150-1100
650	200-1500
660	300-2400

DIMENSIONS

	DIMENSIONS (IN.)									
MOUNTING STYLE	A	B	C	D	E (MIN)	F (MIN)	G	H	I	R (MIN)
620	.31	.19	.69	.40	1.25	1.10	.81	.75	1.09	.06
630	.38	.38	1.00	.47	2.00	1.50	1.24	1.12	1.75	.06
640	.62	.45	1.38	.53	2.25	1.70	1.35	1.25	2.00	.06
641	.62	.45	1.38	.64	2.25	1.70	1.35	1.25	2.00	.06
645	.75	.56	1.75	.64	2.85	2.20	1.61	1.50	2.50	.06
650	.93	.71	2.00	.64	3.50	2.50	1.96	1.81	2.97	.12
660	.75	.94	2.12	.77	4.25	2.70	2.20	2.00	3.68	.12



TYPICAL INSTALLATION



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SERIES 600

HEAVY-DUTY CENTER-BOLT SAFETY MOUNTINGS

Styles: **MM620/630** *For loads to 520 pounds*

SELECTION GUIDE

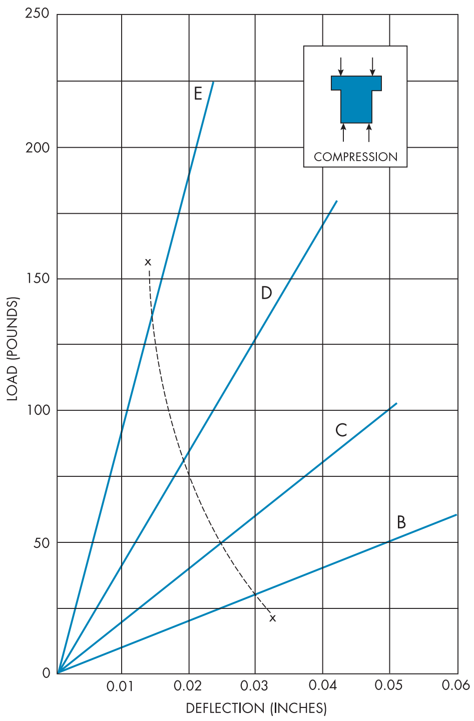
STYLE 620		MINIMUM LOAD FOR 81% ISOLATION (LBS)			
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE			
		1500	2000	2250	2500
B	30		25	20	15
C	50		50	35	30
D	80			75	60
E	140				130

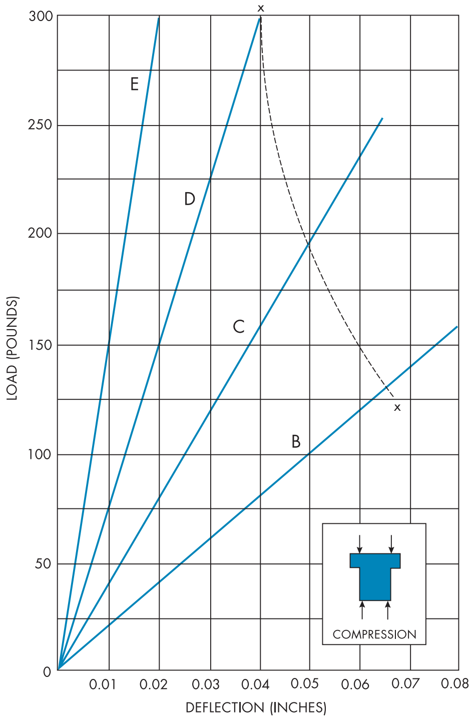
SELECTION GUIDE

STYLE 630		MINIMUM LOAD FOR 81% ISOLATION (LBS)			
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE			
		1500	2000	2250	2500
B	130	110	70	50	40
C	190		140	100	70
D	300		260	190	130
E	520		520	380	260

LOAD DEFLECTION GRAPHS

Deflections below the line X----X are considered safe practice for static loads;
data above that line are useful for calculating deflections under dynamic loads





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SERIES 600

HEAVY-DUTY CENTER-BOLT SAFETY MOUNTINGS

Styles: **MM640/645** *For loads to 1100 pounds*

SELECTION GUIDE

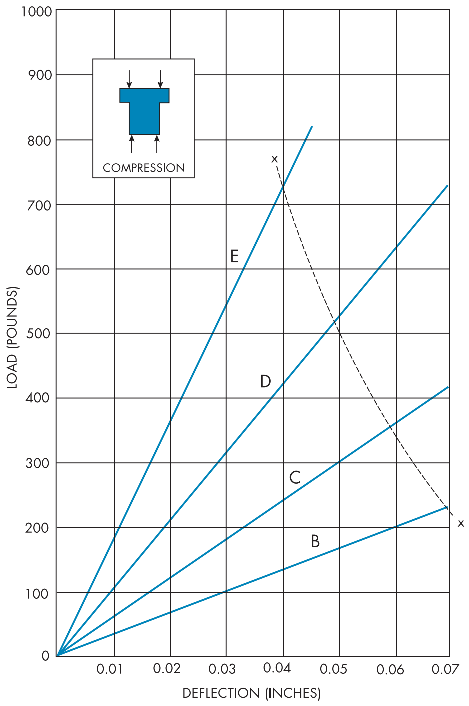
STYLE 640/641		MINIMUM LOAD FOR 81% ISOLATION (LBS)			
		FORCING FREQUENCY IN CYCLES PER MINUTE			
LOAD RATING	MAXIMUM LOAD (LBS)	2000	2500	3000	3600
B	230	190	120	90	60
C	360	330	200	150	100
D	520		370	260	180
E	720		630	450	300

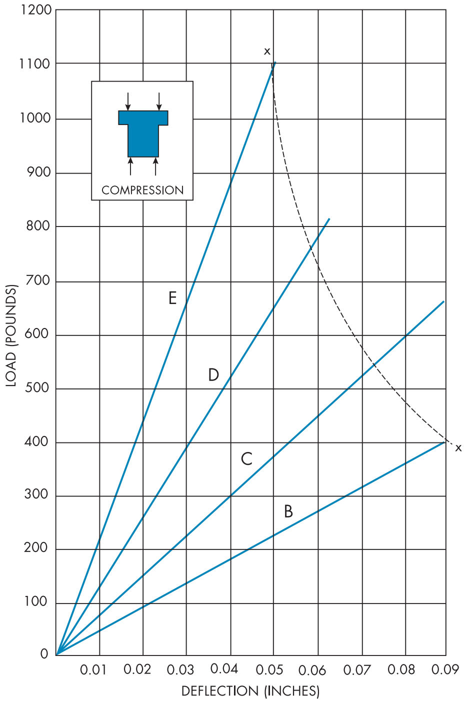
SELECTION GUIDE

STYLE 645		MINIMUM LOAD FOR 81% ISOLATION (LBS)				
		FORCING FREQUENCY IN CYCLES PER MINUTE				
LOAD RATING	MAXIMUM LOAD (LBS)	1750	2000	2500	3000	3600
B	400	320	250	160	110	80
C	540	540	410	260	190	130
D	750		710	450	320	220
E	1100			780	560	380

LOAD DEFLECTION GRAPHS

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads





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CERTIFICATE # 08-511

SERIES 600

HEAVY-DUTY CENTER-BOLT SAFETY MOUNTINGS

Style: **MM650** *For loads to 1500 pounds*

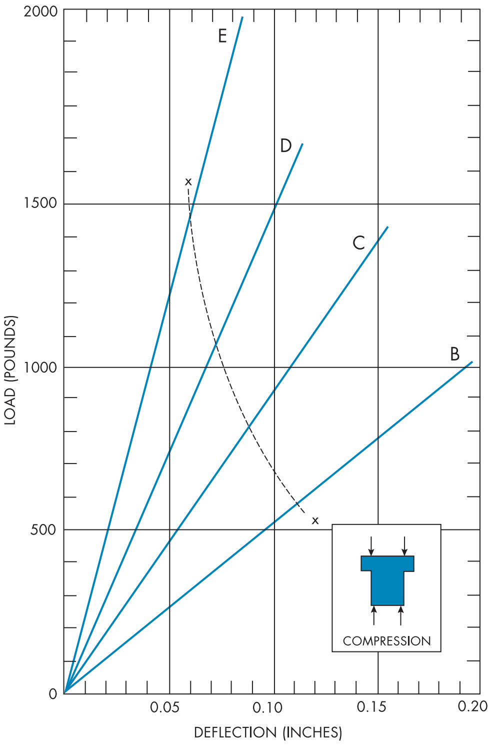
SELECTION GUIDE

STYLE 650		MINIMUM LOAD FOR 81% ISOLATION (LBS)					
		FORCING FREQUENCY IN CYCLES PER MINUTE					
LOAD RATING	MAXIMUM LOAD (LBS)	1500	1750	2000	2500	3000	3600
B	600	520	380	300	200	130	100
C	800		650	500	320	230	150
D	110		1100	830	530	380	260
E	1500			1400	900	630	430

- This Estco Heavy-Duty Center-Bolt Safety Mounting Series is a versatile group of one-piece, low-deflection safety mountings designed for multidirectional isolation in heavy-duty applications. The mountings are rated by static load in the axial direction and dynamic loads up to three times the rated load can be handled. Although static loads in the radial direction are not recommended, dynamic radial loads are acceptable. The resilient element compressed during installation spreads at one end to form a self-contained rebound member. It features a bonded steel bushing that acts as a positive spacer. To install, lubricate the end of the mounting lightly with soapy water and, with an arbor press, push on the bushing to seat the mounting in the bore of the supporting member. Tightening the bolt until stopped by the integral spacer completes the installation.

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads



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SERIES 600

HEAVY-DUTY CENTER-BOLT SAFETY MOUNTINGS

Style: **MM660** *For loads to 2400 pounds*

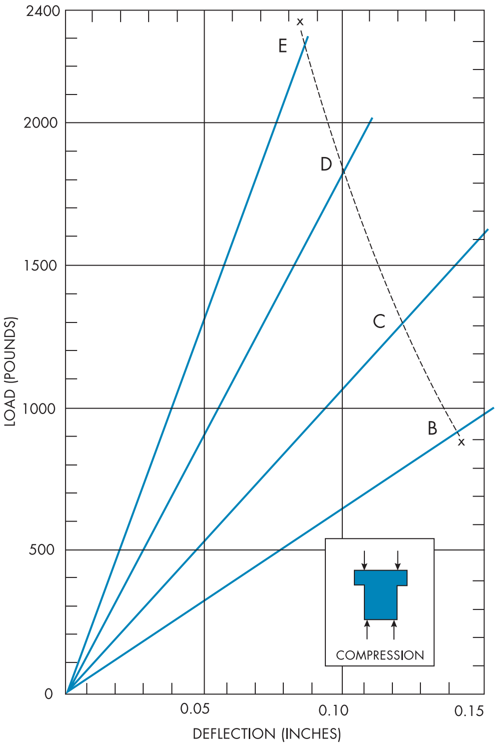
- This Estco Heavy-Duty Center-Bolt Safety Mounting Series is a versatile group of one-piece, low-deflection safety mountings designed for multidirectional isolation in heavy-duty applications. The mountings are rated by static load in the axial direction and dynamic loads up to three times the rated load can be handled. Although static loads in the radial direction are not recommended, dynamic radial loads are acceptable. The resilient element compressed during installation spreads at one end to form a self-contained rebound member. It features a bonded steel bushing that acts as a positive spacer. To install, lubricate the end of the mounting lightly with soapy water and, with an arbor press, push on the bushing to seat the mounting in the bore of the supporting member. Tightening the bolt until stopped by the integral spacer completes the installation.

SELECTION GUIDE

STYLE 660		MINIMUM LOAD FOR 81% ISOLATION (LBS)						
LOAD RATING	MAXIMUM LOAD (LBS)	FORCING FREQUENCY IN CYCLES PER MINUTE						
		1250	1500	1750	2000	2500	3000	3600
B	950	950	670	500	500	240	170	120
C	1300		1050	800	600	400	270	180
D	1850		1800	1350	1000	650	450	300
E	2400			2000	1550	1000	700	500

LOAD DEFLECTION GRAPH

Deflections below the line X----X are considered safe practice for static loads; data above that line are useful for calculating deflections under dynamic loads



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SERIES 1000
CUSTOM MOLDED MOUNTING FEET
Styles: MM1020/9624/9690

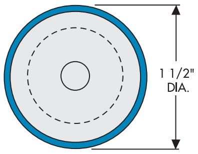
For loads to 62 pounds (1020), 100 pounds (9624), 130 pounds (9690)

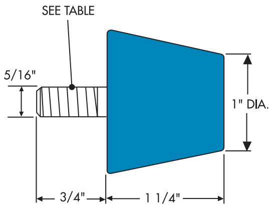
- Custom molded mounting feet are an excellent and efficient way to reduce vibration and movement on industrial equipment and machinery. They are ideal for equipment which is “walking” on solid floors or concrete due to machinery vibration.

MM1020 - RUBBER BUMPERS SELECTION GUIDE

MOUNTING STYLE	STATIC LOAD (LBS)	OCCASIONAL DYNAMIC LOAD (LBS)
1020A	44	80
1020B	49	100
1020C	56	122
1020D	62	145

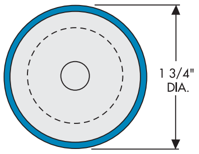
END STUD (IN.)		
THREAD	LENGTH	SUFFIX
5/16-18	9/16	76
5/16-18	1/2	68
5/16-18	3/4	70
5/16-18	1 1/8	74
5/16-24	3/4	94
5/16-24	1 3/4	92

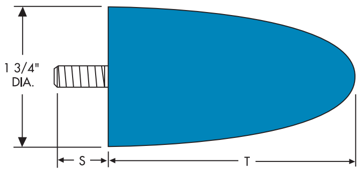




MM9624 - RUBBER BUMPERS SELECTION GUIDE

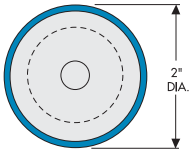
PART NUMBER	DIA (in.)	T (in.)	THREAD	S (in.)
9624-155	1 3/4″	3	5/16-18	5/8″

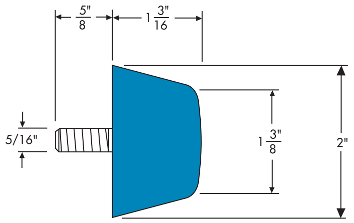




MM9690 - RUBBER BUMPERS SELECTION GUIDE

MOUNTING STYLE	STATIC LOAD (LBS)	OCCASIONAL DYNAMIC LOAD (LBS)
9690 A	92	168
9690 B	102	210
9690 C	117	256
9690 D	130	304





SERIES 5000
BONDED BUSHING AND SNUBBER

Style: MM5000

For loads to 580 pounds

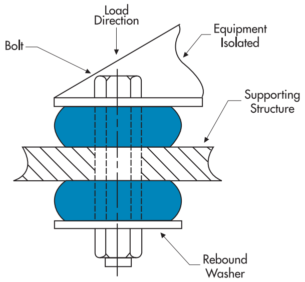
- Estco's 5000 Series Bonded Bushings and snubber Mounts are designed to absorb extreme static and dynamic forces. This system also absorbs forces in the rebound mode. These mounts are designed for engines, cabs, and auxiliary equipment for the on and off highway, military, farm, and construction vehicles.

Typical applications:

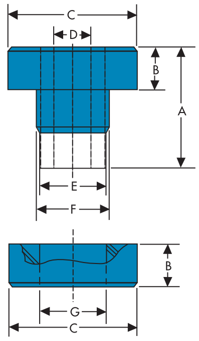
- Engines
- Vehicular Cabs
- Vehicular Electronics.
- Radiators
- Gas tanks
- Transmission Cases

SELECTION GUIDE

PART NUMBER	RATED (lbs) AXIAL LOAD	RATED (lbs) RADIAL LOAD	A	B	C	D	E (REF)	F	G (REF)	H
5001-01 5001-02 5001-03 5001-04 5001-05	35 80 103 235 280	18 27 36 45 55	1.25	.50	1.25	.39	.52	.78	.53	.37
5002-01 5002-02 5002-03 5002-04 5002-05	65 125 170 275 390	45 80 125 190 290	1.94	.78	1.87	.53	.77	1.31	.78	.50
5003-01 5003-02 5003-03 5003-04 5003-05	100 180 250 350 500	80 120 175 265 370	2.50	.90	2.53	.64	.89	1.54	.90	.75
5004-01 5004-02 5004-03 5004-04 5004-05	150 300 400 500 600	110 220 300 400 580	2.88	1.0	3.5	.94	1.35	2.30	1.36	1.00
5006-01 5006-02 5006-03 5006-04 5006-05	35 80 103 235 280	18 27 36 45 55	1.00	.50	1.25	.39	.52	.78	.53	.125
5007-01 5007-02 5007-03 5007-04 5007-05	35 80 103 235 280	18 27 36 45 55	1.00	.50	1.25	.32	.52	.78	.53	.125



TYPICAL INSTALLATION



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SERIES 9000
CYLINDRICAL MOUNTING PADS
Style: MM9000

- Estco's 9000 series bumper pads are an easy and economical method to absorb energy and isolate mechanical vibration on equipment or instrumentation. They are available in a variety of compounds and durometers to meet your specifications. Most are also available with threaded female inserts.

SELECTION GUIDE

PART NUMBER	DIAMETER	PAD HEIGHT	STUD LENGTH	THREAD	STATIC LOAD
mm9801	3/8	5/16	3/8	6..32	5
mm9803	3/8	3/8	3/8	6..32	7
mm9805	7/16	7/16	3/8	6..32	9
mm9807	7/16	1/2	3/8	6..32	10
mm9809	3/8	1/4	3/8	8..32	5
mm9811	3/8	5/32	3/8	8..32	5
mm9813	3/8	1/2	3/8	8..32	8
mm9815	3/8	5/16	3/8	8..32	6
mm9817	7/16	1/2	3/8	8..32	11
mm9819	1/2	3/4	3/8	8..32	35
mm9821	9/16	1/2	3/8	8..32	16
mm9823	9/16	3/4	3/8	8..32	35
mm9825	5/8	1/2	3/8	8..32	17
mm9827	3/4	1/2	3/8	8..32	35
mm9829	3/4	1	3/8	8..32	39
mm9831	9/16	1/2	3/8	10..32	16
mm9833	9/16	5/16	3/8	10..32	12
mm9835	5/8	15/16	3/8	10..32	20
mm9837	3/4	5/8	3/8	10..32	37
mm9839	1	3/8	3/8	10..32	37
mm9841	1	3/4	3/8	10..32	60

* Most parts also available with female inserts.

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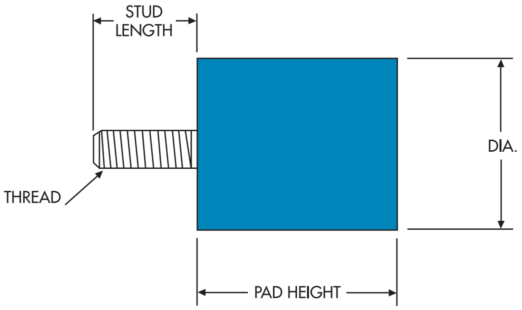


ISO 9001:2000 Certified
CERTIFICATE # 08-511

- Estco's 9000 series bumper pads are an easy and economical method to absorb energy and isolate mechanical vibration on equipment or instrumentation. They are available in a variety of compounds and durometers to meet your specifications. Most are also available with threaded female inserts.

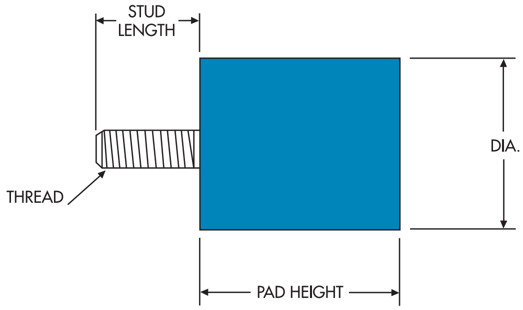
SERIES 9000
CYLINDRICAL MOUNTING PADS
Style: MM9000

SELECTION GUIDE

PART NUMBER	DIAMETER	PAD HEIGHT	STUD LENGTH	THREAD	STATIC LOAD
mm9843	5/8	5/8	1/2	1/4..20	17
mm9845	3/4	3/8	1/2	1/4..20	35
mm9847	3/4	1/2	1/2	1/4..20	36
mm9849	1	3/8	1/2	1/4..20	35
mm9851	3/4	5/8	1/2	1/4..20	37
mm9853	3/4	3/4	1/2	1/4..20	38
mm9855	1	17/32	1/2	1/4..20	54
mm9857	1	3/4	1/2	1/4..20	60
mm9859	1	5/8	1/2	1/4..20	57
mm9861	1	1	1/2	1/4..20	62
mm9863	1 1/4	3/4	1/2	1/4..20	100
mm9865	1 1/4	1	1/2	1/4..20	115
mm9867	1	5/8	1/2	5/16..18	56
mm9869	1	17/32	1/2	5/16..18	54
mm9871	1	3/4	1/2	5/16..18	60
mm9873	1	3/8	1/2	5/16..18	35
mm9875	1	1	1/2	5/16..18	62
mm9877	3/4	3/4	1/2	5/16..18	38
mm9879	1	1 1/4	5/8	5/16..18	63
mm9881	1	1 1/2	5/8	5/16..18	65
mm9883	1 1/4	3/4	9/16	5/16..18	100
mm9885	1 1/4	1	9/16	5/16..18	112
mm9887	1 1/4	1 1/4	9/16	5/16..18	90
mm9889	1 3/8	5/8	9/16	5/16..18	158
mm9891	1 3/8	1	9/16	5/16..18	110
mm9893	1 3/8	1 1/2	9/16	5/16..18	148
mm9895	1 1/2	1	9/16	5/16..18	100
mm9897	2	1 3/4	9/16	5/16..18	250
mm9899	2	1	9/16	5/16..18	175
mm9901	2	1 3/16	9/16	5/16..18	195

* Most parts also available with female inserts.

continued/next page



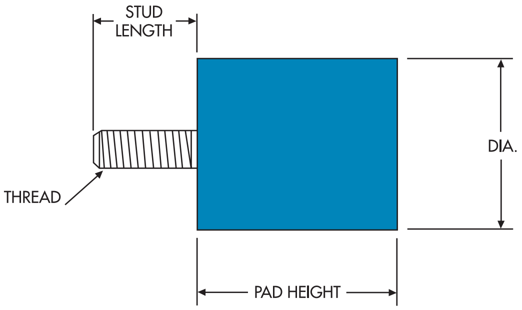
SERIES 9000
CYLINDRICAL MOUNTING PADS
Style: MM9000

- Estco's 9000 series bumper pads are an easy and economical method to absorb energy and isolate mechanical vibration on equipment or instrumentation. They are available in a variety of compounds and durometers to meet your specifications. Most are also available with threaded female inserts.

SELECTION GUIDE

PART NUMBER	DIAMETER	PAD HEIGHT	STUD LENGTH	THREAD	STATIC LOAD
mm9903	1	3/4	3/4	3/8..16	60
mm9905	1	1	3/8	3/8..16	62
mm9907	1 1/2	1	3/4	3/8..16	100
mm9909	1 3/8	1	3/4	3/8..16	110
mm9911	1 1/2	3/4	1 5/16	3/8..16	90
mm9913	2	1 1/2	3/4	3/8..16	165
mm9915	2	1 3/4	3/4	3/8..16	280
mm9917	2	2 1/8	3/4	3/8..16	325

* Most parts also available with female inserts.



ISO 9001:2000 Certified
CERTIFICATE # 08-511

Notes:

LIQUID TIGHT STRAIN RELIEFS

Nylon Liquid Tight Strain Relief Fittings - Standard PG, NPT, Metric Threads
13-1, 13-2

Nylon Liquid Tight Strain Relief Fittings - Elongated PG & Metric Threads
13-3

Nylon Liquid Tight Strain Relief Fittings - Reduced Body - PG Threads
13-4

Nylon Liquid Tight Strain Relief Fittings - 90° Snap Elbow - PG/NPT/ Metric Threads
13-5

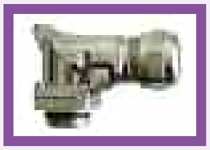
Nylon “LTSRF” Clamp High Performance and Romex PG/ Metric Threads
13-6

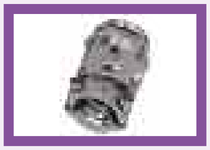
Nylon “LTSRF” Multi-Hole - PG Threads
13-7, 13-8, 13-9

Nickel Plated Brass Liquid Tight Strain Relief Fittings - Standard PG, NPT, Metric Threads
13-11

Nickel Plated Brass Liquid Tight Strain Relief Fittings - Mini WADI & WADI XL - PG, Metric Threads
13-12

Nickel Plated Brass Liquid Tight Strain Relief Fittings - Elongated PG, Metric Threads
13-13


Nickel Plated Brass Liquid Tight Strain Relief Fittings - 90° Elbow PG, Metric Threads
13-14


Clamp High Performance - PG, NPT, Metric Threads
13-14

Nickel Plated Brass Liquid Tight Strain Relief Fittings - EMI/RFI Proof
13-15, 13-16

Nickel Plated Brass Liquid Tight Strain Relief Fittings - Multi-Hole PG NPT, Metric Threads
13-17, 13-18, 13-19

Nylon Liquid Tight Strain Relief Fittings - PVDF PG NPT, Metric Threads
13-20

Nickel Plated Brass Liquid Tight Strain Relief Fittings - PVDF PG NPT, Metric Threads
13-21

303 Stainless Steel Liquid Tight Strain Relief Fittings - PG NPT, Metric Threads
13-22

Accessories - Locking Nuts, O-Rings, Hole/Hex Plugs - PG NPT, Metric Threads
13-24, 13-25, 13-26, 13-27

Adapters, Reducers & Enlargers - Nylon, Brass, Steel
13-28 – 13-33

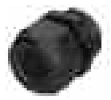
Conduit System - Standard, Push-In, Turn-To-Seal, Snapclic, Double Seal
13-34 – 13-38

ESTCO
Liquid Tight Strain Reliefs

Hummel Nylon Liquid Tight Strain Relief Fittings

Standard - PG & NPT Threads

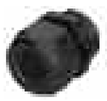
ISO 9001:2000 Certified
CERTIFICATE # 08-511

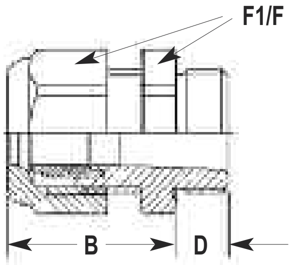
PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings		Flex Fittings				**A** Clearance Hole	**B** Body Length (Dome)	**C** Body Length (Flex)	**D** Thread Length	**F1/F** Wrench Flats
Black 	Gray	Black	Gray	Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-CD07AA-BK	SR-CD07AA-GY	SR-CF07AA-BK	SR-CF07AA-GY	.12 - .26 (3 - 6.5)	**PG 7 / 1/4" NPT**	.49 (12.5)	.83 (21)	2.13 (54)	.31 (8)	.59 (15)
SR-CD07AR-BK	SR-CD07AR-GY	SR-CF07AR-BK	SR-CF07AR-GY	.08 - .20 (2 - 5)						
SR-CD09AA-BK	SR-CD09AA-GY	SR-CF09AA-BK	SR-CF09AA-GY	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.87 (22)	2.48 (63)	.31 (8)	.75 (19)
SR-CD09AR-BK	SR-CD09AR-GY	SR-CF09AR-BK	SR-CF09AR-GY	.08 - .24 (2 - 6)						
SR-CD11AA-BK	SR-CD11AA-GY	SR-CF11AA-BK	SR-CF11AA-GY	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.98 (25)	3.07 (78)	.31 (8)	.87 (22) / .75 (19)
SR-CD11AR-BK	SR-CD11AR-GY	SR-CF11AR-BK	SR-CF11AR-GY	.12 - .28 (3 - 7)						
SR-CD13AA-BK	SR-CD13AA-GY	SR-CF13AA-BK	SR-CF13AA-GY	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	1.06 (27)	3.54 (90)	.35 (9)	.94 (24)
SR-CD13AR-BK	SR-CD13AR-GY	SR-CF13AR-BK	SR-CF13AR-GY	.20 - .35 (5 - 9)						
SR-CD16AA-BK	SR-CD16AA-GY	SR-CF16AA-BK	SR-CF16AA-GY	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	1.10 (28)	3.94 (100)	.39 (10)	1.06 (27)
SR-CD16AR-BK	SR-CD16AR-GY	SR-CF16AR-BK	SR-CF16AR-GY	.28 - .47 (7 - 12)						
SR-CD21AA-BK	SR-CD21AA-GY	SR-CF21AA-BK	SR-CF21AA-GY	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	1.22 (31)	4.49 (114)	.43 (11)	1.30 (33)
SR-CD21AR-BK	SR-CD21AR-GY	SR-CF21AR-BK	SR-CF21AR-GY	.35 - .63 (9 - 16)						
SR-CD29AA-BK	SR-CD29AA-GY	-	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.54 (39)	-	.43 (11)	1.65 (42)
SR-CD29AR-BK	SR-CD29AR-GY	-	-	.51 - .79 (13 - 20)						
SR-CD36AA-BK	SR-CD36AA-GY	-	-	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	1.89 (48)	-	.51 (13)	2.09 (53)
SR-CD36AR-BK	SR-CD36AR-GY	-	-	.79 - 1.02 (20 - 26)						
SR-CD42AA-BK	SR-CD42AA-GY	-	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.93 (49)	-	.51 (13)	2.36 (60)
SR-CD42AR-BK	SR-CD42AR-GY	-	-	.98 - 1.22 (25 - 31)						
SR-CD48AA-BK	SR-CD48AA-GY	-	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.93 (49)	-	.55 (14)	2.56 (65)
SR-CD48AR-BK	SR-CD48AR-GY	-	-	1.14 - 1.38 (29 - 35)						
SR-CD09NA-BK	SR-CD09NA-GY	SR-CF09NA-BK	SR-CF09NA-GY	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17.2)	.87 (22)	2.48 (63)	.59 (15)	.87 (22) / .75 (19)
SR-CD09NR-BK	SR-CD09NR-GY	SR-CF09NR-BK	SR-CF09NR-GY	.08 - .24 (2 - 6)						
SR-CD13NA-BK	SR-CD13NA-GY	SR-CF13NA-BK	SR-CF13NA-GY	.24 - .47 (6 - 12)	**1/2" NPT**	.83 (21.1)	1.06 (27)	3.54 (90)	.51 (13)	.94 (24)
SR-CD13NR-BK	SR-CD13NR-GY	SR-CF13NR-BK	SR-CF13NR-GY	.20 - .35 (5 - 9)						
SR-CD16NA-BK	SR-CD16NA-GY	SR-CF16NA-BK	SR-CF16NA-GY	.39 - .55 (10 - 14)	**1/2" NPT**	.83 (21.1)	1.10 (28)	3.94 (100)	.51 (13)	1.06 (27)
SR-CD16NR-BK	SR-CD16NR-GY	SR-CF16NR-BK	SR-CF16NR-GY	.28 - .47 (7 - 12)						
SR-CD21NA-BK	SR-CD21NA-GY	SR-CF21NA-BK	SR-CF21NA-GY	.51 - .71 (13 - 18)	**3/4" NPT**	1.05 (26.7)	1.22 (31)	4.49 (114)	.55 (14)	1.30 (33)
SR-CD21NR-BK	SR-CD21NR-GY	SR-CF21NR-BK	SR-CF21NR-GY	.35 - .63 (9 - 16)						
SR-CD29NA-BK	SR-CD29NA-GY	-	-	.71 - .98 (18 - 25)	**1" NPT**	1.35 (34.3)	1.54 (39)	-	.75 (19)	1.65 (42)
SR-CD29NR-BK	SR-CD29NR-GY	-	-	.51 - .79 (13 - 20)						
SR-CD29LA-BK	SR-CD29LA-GY	-	-	.71 - .98 (18 - 25)	**1-1/4" NPT**	1.65 (41.9)	1.54 (39)	-	.63 (16)	1.81 (46) / 1.65 (42)
SR-CD29LR-BK	SR-CD29LR-GY	-	-	.51 - .79 (13 - 20)						
SR-CD36NA-BK	SR-CD36NA-GY	-	-	.87 - 1.26 (22 - 32)	**1-1/2" NPT**	1.92 (48.7)	1.89 (48)	-	.79 (20)	2.09 (53)
SR-CD36NR-BK	SR-CD36NR-GY	-	-	.79 - 1.02 (20 - 26)						

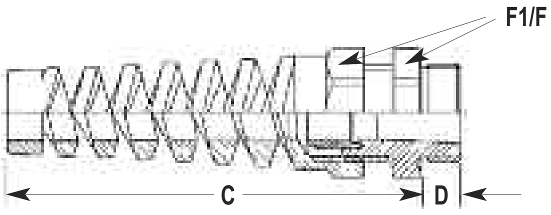
The straight PG 7 thread fits a 1/4" NPT female or 1/2"-20 UNF thread.

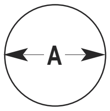
Hummel Nylon Liquid Tight Strain Relief Fittings

Standard - Metric Threads

PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings		Flex Fittings								
Black 	Gray 	Black 	Gray 	Inches (mm)	See page 49 for thread specs	A Clearance Hole + .01" (+.25mm)	B Body Length (Dome)	C Body Length (Flex)	D Thread Length	F1/F Wrench Flats
SR-CD12MA-BK	SR-CD12MA-GY	SR-CF12MA-BK	SR-CF12MA-GY	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.83 (21)	2.13 (54)	.31 (8)	.59 (15)
SR-CD12MR-BK	SR-CD12MR-GY	SR-CF12MR-BK	SR-CF12MR-GY	.08 - .20 (2 - 5)						
SR-CD16MA-BK	SR-CD16MA-GY	SR-CF16MA-BK	SR-CF16MA-GY	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	.87 (22)	2.48 (63)	.31 (8)	.75 (19)
SR-CD16MR-BK	SR-CD16MR-GY	SR-CF16MR-BK	SR-CF16MR-GY	.08 - .24 (2 - 6)						
SR-CD17MA-BK	SR-CD17MA-GY	SR-CF17MA-BK	SR-CF17MA-GY	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	.98 (25)	3.07 (78)	.31 (8)	.87 (22)
SR-CD17MR-BK	SR-CD17MR-GY	SR-CF17MR-BK	SR-CF17MR-GY	.12 - .28 (3 - 7)						
SR-CD20MA-BK	SR-CD20MA-GY	SR-CF20MA-BK	SR-CF20MA-GY	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	1.06 (27)	3.54 (90)	.35 (9)	.94 (24)
SR-CD20MR-BK	SR-CD20MR-GY	SR-CF20MR-BK	SR-CF20MR-GY	.20 - .35 (5 - 9)						
SR-CD22MA-BK	SR-CD22MA-GY	SR-CF22MA-BK	SR-CF22MA-GY	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	1.10 (28)	3.94 (100)	.35 (9)	1.06 (27)
SR-CD22MR-BK	SR-CD22MR-GY	SR-CF22MR-BK	SR-CF22MR-GY	.28 - .47 (7 - 12)						
SR-CD25MA-BK	SR-CD25MA-GY	SR-CF25MA-BK	SR-CF25MA-GY	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.22 (31)	4.49 (114)	.43 (11)	1.30 (33)
SR-CD25MR-BK	SR-CD25MR-GY	SR-CF25MR-BK	SR-CF25MR-GY	.35 - .63 (9 - 16)						
SR-CD32MA-BK	SR-CD32MA-GY	-	-	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.54 (39)	-	.43 (11)	1.65 (42)
SR-CD32MR-BK	SR-CD32MR-GY	-	-	.51 - .79 (13 - 20)						
SR-CD40MA-BK	SR-CD40MA-GY	-	-	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.89 (48)	-	.51 (13)	2.09 (53)
SR-CD40MR-BK	SR-CD40MR-GY	-	-	.79 - 1.02 (20 - 26)						
SR-CD50MA-BK	SR-CD50MA-GY	-	-	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	1.93 (49)	-	.51 (13)	2.36 (60)
SR-CD50MR-BK	SR-CD50MR-GY	-	-	.98 - 1.22 (25 - 31)						
SR-CD63MA-BK	SR-CD63MA-GY	-	-	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	1.93 (49)	-	.55 (14)	2.56 (65) /
SR-CD63MR-BK	SR-CD63MR-GY	-	-	1.14 - 1.38 (29 - 35)						2.68 (68)







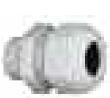
Suggested Clearance Hole for Non-Threaded Mounting

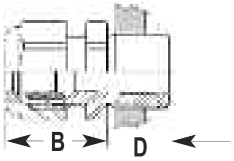
ISO 9001:2000 Certified
CERTIFICATE # 08-511

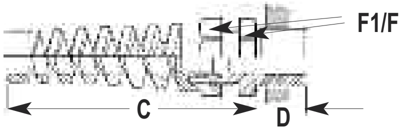
Hummel Nylon Liquid Tight Strain Relief Fittings

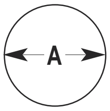
Elongated - PG & Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings		Flex Fittings				A	B	C	D	F1/F
Black	Gray	Black	Gray			Clearance Hole	Body Length (Dome)	Body Length (Flex)	Thread Length	Wrench Flats
				Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-CD07CA-BK	SR-CD07CA-GY	SR-CF07CA-BK	SR-CF07CA-GY	.12 - .26 (3 - 6.5)	**PG 7**	.49 (12.5)	.83 (21)	2.13 (54)	.59 (15)	.59 (15)
SR-CD07CR-BK	SR-CD07CR-GY	SR-CF07CR-BK	SR-CF07CR-GY	.08 - .20 (2 - 5)						
SR-CD09CA-BK	SR-CD09CA-GY	SR-CF09CA-BK	SR-CF09CA-GY	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.87 (22)	2.48 (63)	.59 (15)	.75 (19)
SR-CD09CR-BK	SR-CD09CR-GY	SR-CF09CR-BK	SR-CF09CR-GY	.08 - .24 (2 - 6)						
SR-CD11CA-BK	SR-CD11CA-GY	SR-CF11CA-BK	SR-CF11CA-GY	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.98 (25)	3.07 (78)	.59 (15)	.87 (22)
SR-CD11CR-BK	SR-CD11CR-GY	SR-CF11CR-BK	SR-CF11CR-GY	.12 - .28 (3 - 7)						
SR-CD13CA-BK	SR-CD13CA-GY	SR-CF13CA-BK	SR-CF13CA-GY	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	1.06 (27)	3.54 (90)	.59 (15)	.94 (24)
SR-CD13CR-BK	SR-CD13CR-GY	SR-CF13CR-BK	SR-CF13CR-GY	.20 - .35 (5 - 9)						
SR-CD16CA-BK	SR-CD16CA-GY	SR-CF16CA-BK	SR-CF16CA-GY	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	1.10 (28)	3.94 (100)	.59 (15)	1.06 (27)
SR-CD16CR-BK	SR-CD16CR-GY	SR-CF16CR-BK	SR-CF16CR-GY	.28 - .47 (7 - 12)						
SR-CD21CA-BK	SR-CD21CA-GY	SR-CF21CA-BK	SR-CF21CA-GY	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	1.22 (31)	4.49 (114)	.59 (15)	1.30 (33)
SR-CD21CR-BK	SR-CD21CR-GY	SR-CF21CR-BK	SR-CF21CR-GY	.35 - .63 (9 - 16)						
SR-CD29CA-BK	SR-CD29CA-GY	-	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.54 (39)	-	.59 (15)	1.65 (42)
SR-CD29CR-BK	SR-CD29CR-GY	-	-	.51 - .79 (13 - 20)						
SR-CD36CA-BK	SR-CD36CA-GY	-	-	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	1.89 (48)	-	.71 (18)	2.09 (53)
SR-CD36CR-BK	SR-CD36CR-GY	-	-	.79 - 1.02 (20 - 26)						
SR-CD42CA-BK	SR-CD42CA-GY	-	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.93 (49)	-	.71 (18)	2.36 (60)
SR-CD42CR-BK	SR-CD42CR-GY	-	-	.98 - 1.22 (25 - 31)						
SR-CD48CA-BK	SR-CD48CA-GY	-	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.93 (49)	-	.71 (18)	2.56 (65)
SR-CD48CR-BK	SR-CD48CR-GY	-	-	1.14 - 1.38 (29 - 35)						
SR-CD12DA-BK	SR-CD12DA-GY	SR-CF12DA-BK	SR-CF12DA-GY	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.83 (21)	2.13 (54)	.59 (15)	.59 (15)
SR-CD12DR-BK	SR-CD12DR-GY	SR-CF12DR-BK	SR-CF12DR-GY	.08 - .20 (2 - 5)						
SR-CD16DA-BK	SR-CD16DA-GY	SR-CF16DA-BK	SR-CF16DA-GY	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	.87 (22)	2.48 (63)	.59 (15)	.75 (19)
SR-CD16DR-BK	SR-CD16DR-GY	SR-CF16DR-BK	SR-CF16DR-GY	.08 - .24 (2 - 6)						
SR-CD17DA-BK	SR-CD17DA-GY	SR-CF17DA-BK	SR-CF17DA-GY	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	.98 (25)	3.07 (78)	.59 (15)	.87 (22)
SR-CD17DR-BK	SR-CD17DR-GY	SR-CF17DR-BK	SR-CF17DR-GY	.12 - .28 (3 - 7)						
SR-CD20DA-BK	SR-CD20DA-GY	SR-CF20DA-BK	SR-CF20DA-GY	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	1.06 (27)	3.54 (90)	.59 (15)	.94 (24)
SR-CD20DR-BK	SR-CD20DR-GY	SR-CF20DR-BK	SR-CF20DR-GY	.20 - .35 (5 - 9)						
SR-CD22DA-BK	SR-CD22DA-GY	SR-CF22DA-BK	SR-CF22DA-GY	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	1.10 (28)	3.94 (100)	.59 (15)	1.06 (27)
SR-CD22DR-BK	SR-CD22DR-GY	SR-CF22DR-BK	SR-CF22DR-GY	.28 - .47 (7 - 12)						
SR-CD25DA-BK	SR-CD25DA-GY	SR-CF25DA-BK	SR-CF25DA-GY	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.22 (31)	4.49 (114)	.59 (15)	1.30 (33)
SR-CD25DR-BK	SR-CD25DR-GY	SR-CF25DR-BK	SR-CF25DR-GY	.35 - .63 (9 - 16)						
SR-CD32DA-BK	SR-CD32DA-GY	-	-	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.54 (39)	-	.59 (15)	1.65 (42)
SR-CD32DR-BK	SR-CD32DR-GY	-	-	.51 - .79 (13 - 20)						
SR-CD40DA-BK	SR-CD40DA-GY	-	-	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.89 (48)	-	.71 (18)	2.09 (53)
SR-CD40DR-BK	SR-CD40DR-GY	-	-	.79 - 1.02 (20 - 26)						
SR-CD50DA-BK	SR-CD50DA-GY	-	-	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	1.93 (49)	-	.71 (18)	2.36 (60)
SR-CD50DR-BK	SR-CD50DR-GY	-	-	.98 - 1.22 (25 - 31)						
SR-CD63DA-BK	SR-CD63DA-GY	-	-	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	1.93 (49)	-	.71 (18)	2.56 (65) /2.68 (68)
SR-CD63DR-BK	SR-CD63DR-GY	-	-	1.14 - 1.38 (29 - 35)						







Suggested Clearance Hole for Non-Threaded Mounting

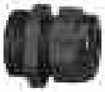
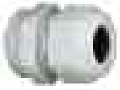
Elongated is recommend where the Strain Relief has to pass through a thick wall or the application just needs the extra thread length.

Hummel Nylon Liquid Tight Strain Relief Fittings

Reduced Body - PG Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

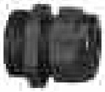
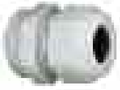
If your cable diameter decreases, but your thread remains the same.

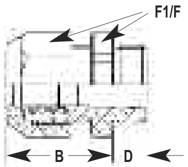
PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings		Flex Fittings				A Clearance Hole	B Body Length (Dome)	C Body Length (Flex)	D Thread Length	F1/F Wrench Flats
Black 	Gray 	Black	Gray	Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-CD09BA-BK	SR-CD09BA-GY	SR-CF09BA-BK	SR-CF09BA-GY	.11 - .26 (3-6.5)	PG 9	.60 (15.2)	.83 (21)	2.13 (54)	.31 (8)	.59 (15) /
SR-CD09BR-BK	SR-CD09BR-GY	SR-CF09BR-BK	SR-CF09BR-GY	.08 - .20 (2-5)						.75 (19)
SR-CD11BA-BK	SR-CD11BA-GY	SR-CF11BA-BK	SR-CF11BA-GY	.16 - .31 (4-8)	PG 11	.73 (18.5)	.87 (22)	2.48 (63)	.31 (8)	.75 (19) /
SR-CD11BR-BK	SR-CD11BR-GY	SR-CF11BR-BK	SR-CF11BR-GY	.08 - .24 (2-6)						.87 (22)
SR-CD13BA-BK	SR-CD13BA-GY	SR-CF13BA-BK	SR-CF13BA-GY	.20 - .39 (5-10)	PG 13	.80 (20.3)	.98 (25)	3.07 (78)	.35 (9)	.87 (22) /
SR-CD13BR-BK	SR-CD13BR-GY	SR-CF13BR-BK	SR-CF13BR-GY	.11 - .28 (3-7)						.94 (24)
SR-CD16BA-BK	SR-CD16BA-GY	SR-CF16BA-BK	SR-CF16BA-GY	.24 - .47 (6-12)	PG 16	.88 (22.3)	1.06 (27)	3.54 (90)	.39 (10)	.94 (24) /
SR-CD16BR-BK	SR-CD16BR-GY	SR-CF16BR-BK	SR-CF16BR-GY	.20 - .35 (5-9)						1.06 (27)
SR-CD21BA-BK	SR-CD21BA-GY	SR-CF21BA-BK	SR-CF21BA-GY	.39 - .55 (10-14)	PG 21	1.12 (28.4)	1.10 (28)	3.94 (100)	.43 (11)	1.06 (27) /
SR-CD21BR-BK	SR-CD21BR-GY	SR-CF21BR-BK	SR-CF21BR-GY	.27 - .47 (7-12)						1.30 (33)

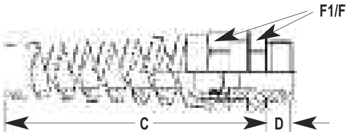
Hummel Nylon Liquid Tight Strain Relief Fittings

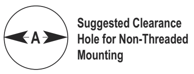
Enlarged Body - PG Threads

If your cable diameter increases, but your thread remains the same.

PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings		Flex Fittings				A Clearance Hole	B Body Length (Dome)	C Body Length (Flex)	D Thread Length	F1/F Wrench Flats
Black 	Gray 	Black	Gray	Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-CD07GA-BK	SR-CD07GA-GY	SR-CF07GA-BK	SR-CF07GA-GY	.16 - .31 (4-8)	PG 7 / 1/4" NPT	.49 (12.5)	.87 (22)	2.48 (63)	.31 (8)	.75 (19)
SR-CD07GR-BK	SR-CD07GR-GY	SR-CF07GR-BK	SR-CF07GR-GY	.08 - .24 (2-6)						
SR-CD09GA-BK	SR-CD09GA-GY	SR-CF09GA-BK	SR-CF09GA-GY	.20 - .39 (5-10)	PG 9	.60 (15.2)	.98 (25)	3.07 (78)	.31 (8)	.87 (22)
SR-CD09GR-BK	SR-CD09GR-GY	SR-CF09GR-BK	SR-CF09GR-GY	.11 - .27 (3-7)						
SR-CD11GA-BK	SR-CD11GA-GY	SR-CF11GA-BK	SR-CF11GA-GY	.24 - .47 (6-12)	PG 11	.73 (18.5)	1.06 (27)	3.54 (90)	.31 (8)	.94 (24)
SR-CD11GR-BK	SR-CD11GR-GY	SR-CF11GR-BK	SR-CF11GR-GY	.20 - .35 (5-9)						
SR-CD13GA-BK	SR-CD13GA-GY	SR-CF13GA-BK	SR-CF13GA-GY	.39 - .55 (10-14)	PG 13	.80 (20.3)	1.10 (28)	3.94 (100)	.35 (9)	1.06 (27)
SR-CD13GR-BK	SR-CD13GR-GY	SR-CF13GR-BK	SR-CF13GR-GY	.27 - .47 (7-12)						
SR-CD16GA-BK	SR-CD16GA-GY	SR-CF16GA-BK	SR-CF16GA-GY	.51 - .71 (13-18)	PG 16	.88 (22.3)	1.22 (31)	4.49 (114)	.39 (10)	1.30 (33)
SR-CD16GR-BK	SR-CD16GR-GY	SR-CF16GR-BK	SR-CF16GR-GY	.35 - .63 (9-16)						







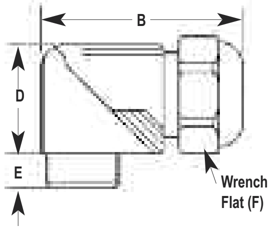
Hummel Nylon Liquid Tight Strain Relief Fittings

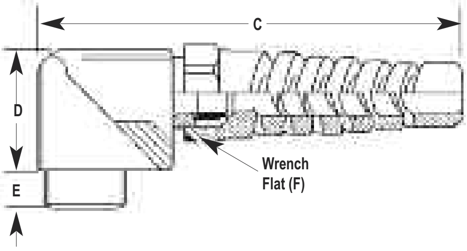
90° Snap Elbow - PG/NPT/Metric Threads

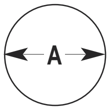
ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)					
Dome Fittings		Flex Fittings				A Clearance Hole + .01" (+.25mm)	B Body Length (Dome)	C Body Length (Flex)	D Height	E Thread Length	F1/F Wrench Flats
Black	Gray	Black	Gray	Inches (mm)	See page 49 for thread specs						
SR-ED09AA-BK	SR-ED09AA-GY	SR-EF09AA-BK	SR-EF09AA-GY	.16 - .31 (4-8)	PG 9	.60 (15.2)	1.77 (45)	3.35 (85)	.91 (23)	.31 (8)	.75 (19)
SR-ED09AR-BK	SR-ED09AR-GY	SR-EF09AR-BK	SR-EF09AR-GY	.08 - .24 (2-6)							
SR-ED11AA-BK	SR-ED11AA-GY	SR-EF11AA-BK	SR-EF11AA-GY	.20 - .39 (5-10)	PG 11	.73 (18.5)	1.97 (50)	4.05 (103)	1.06 (27)	.31 (8)	.87 (22)
SR-ED11AR-BK	SR-ED11AR-GY	SR-EF11AR-BK	SR-EF11AR-GY	.11 - .28 (3-7)							
SR-ED13AA-BK	SR-ED13AA-GY	SR-EF13AA-BK	SR-EF13AA-GY	.24 - .47 (6-12)	PG 13	.80 (20.3)	2.24 (57)	4.69 (119)	1.20 (30.5)	.35 (9)	.94 (24)
SR-ED13AR-BK	SR-ED13AR-GY	SR-EF13AR-BK	SR-EF13AR-GY	.20 - .35 (5-9)							
SR-ED16AA-BK	SR-ED16AA-GY	SR-EF16AA-BK	SR-EF16AA-GY	.39 - .55 (10-14)	PG 16	.88 (22.3)	2.32 (59)	5.12 (130)	1.28 (32)	.39 (10)	1.06 (27)
SR-ED16AR-BK	SR-ED16AR-GY	SR-EF16AR-BK	SR-EF16AR-GY	.27 - .47 (7-12)							
SR-ED21AA-BK	SR-ED21AA-GY	SR-EF21AA-BK	SR-EF21AA-GY	.51 - .71 (13-18)	PG 21	1.12 (28.4)	2.87 (73)	6.14 (156)	1.57 (40)	.43 (11)	1.30 (33)
SR-ED21AR-BK	SR-ED21AR-GY	SR-EF21AR-BK	SR-EF21AR-GY	.35 - .63 (9-16)							
SR-ED29AA-BK	SR-ED29AA-GY	-	-	.71 - .98 (18-25)	PG 29	1.47 (37.3)	3.58 (91)	-	2.03 (51.5)	.43 (11)	1.65 (42)
SR-ED29AR-BK	SR-ED29AR-GY	-	-	.51 - .79 (13-20)							
SR-ED09NA-BK	SR-ED09NA-GY	SR-EF09NA-BK	SR-EF09NA-GY	.16 - .31 (4-8)	3/8" NPT	.68 (17.2)	1.77 (45)	3.35 (85)	.91 (23)	.59 (15)	.75 (19)
SR-ED09NR-BK	SR-ED09NR-GY	SR-EF09NR-BK	SR-EF09NR-GY	.08 - .24 (2-6)							
SR-ED13NA-BK	SR-ED13NA-GY	SR-EF13NA-BK	SR-EF13NA-GY	.24 - .47 (6-12)	1/2" NPT	.83 (21.1)	2.24 (57)	4.69 (119)	1.20 (30.5)	.51 (13)	.94 (24)
SR-ED13NR-BK	SR-ED13NR-GY	SR-EF13NR-BK	SR-EF13NR-GY	.20 - .35 (5-9)							
SR-ED16NA-BK	SR-ED16NA-GY	SR-EF16NA-BK	SR-EF16NA-GY	.39 - .55 (10-14)	1/2" NPT	.83 (21.1)	2.32 (59)	5.12 (130)	1.24 (31.5)	.51 (13)	1.06 (27)
SR-ED16NR-BK	SR-ED16NR-GY	SR-EF16NR-BK	SR-EF16NR-GY	.27 - .47 (7-12)							
SR-ED21NA-BK	SR-ED21NA-GY	SR-EF21NA-BK	SR-EF21NA-GY	.51 - .71 (13-18)	3/4" NPT	1.05 (26.7)	2.87 (73)	6.14 (156)	1.57 (40)	.51 (13)	1.30 (33)
SR-ED21NR-BK	SR-ED21NR-GY	SR-EF21NR-BK	SR-EF21NR-GY	.35 - .63 (9-16)							
SR-ED29NA-BK	SR-ED29NA-GY	-	-	.71 - .98 (18-25)	1" NPT	1.35 (34.3)	3.58 (91)	-	1.97 (50)	.75 (19)	1.65 (42)
SR-ED29NR-BK	SR-ED29NR-GY	-	-	.51 - .79 (13-20)							
SR-ED16MA-BK	SR-ED16MA-GY	SR-EF16MA-BK	SR-EF16MA-GY	.16 - .31 (4-8)	M16 x 1.5	.63 (16)	1.77 (45)	3.35 (85)	.91 (23)	.31 (8)	.75 (19)
SR-ED16MR-BK	SR-ED16MR-GY	SR-EF16MR-BK	SR-EF16MR-GY	.08 - .24 (2-6)							
SR-ED20MA-BK	SR-ED20MA-GY	SR-EF20MA-BK	SR-EF20MA-GY	.24 - .47 (6-12)	M20 x 1.5	.79 (20)	2.24 (57)	4.68 (119)	1.20 (30.5)	.35 (9)	.94 (24)
SR-ED20MR-BK	SR-ED20MR-GY	SR-EF20MR-BK	SR-EF20MR-GY	.20 - .35 (5-9)							
SR-ED25MA-BK	SR-ED25MA-GY	SR-EF25MA-BK	SR-EF25MA-GY	.51 - .71 (13-18)	M25 x 1.5	.98 (25)	2.87 (73)	6.14 (156)	1.57 (40)	.43 (11)	1.30 (33)
SR-ED25MR-BK	SR-ED25MR-GY	SR-EF25MR-BK	SR-EF25MR-GY	.35 - .63 (9-16)							
SR-ED32MA-BK	SR-ED32MA-GY	-	-	.71 - .98 (18-25)	M32 x 1.5	1.26 (32)	3.58 (91)	-	2.03 (51.5)	.43 (11)	1.65 (42)
SR-ED32MR-BK	SR-ED32MR-GY	-	-	.51 - .79 (13-20)							

Liquid Tight Elbow Strain Relief Fitting for space and time saving applications.







Suggested Clearance Hole for Non-Threaded Mounting

Hummel Nylon Liquid Tight Strain Relief Fittings

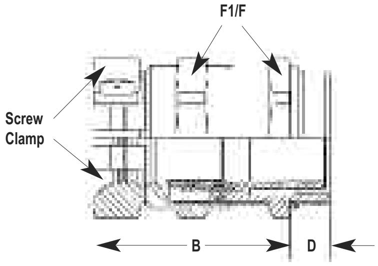
Camp High Performance - PG & Metric Threads

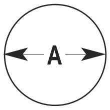
ISO 9001:2000 Certified
CERTIFICATE # 08-511

High Performance Fittings with Clamp

PART NUMBERS	CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)			
Clamp Fittings		See page 49 for thread specs	**A** Clearance Hole	**B** Body Length (Dome)	**D** Thread Length	**F1/F** Wrench Flats
	Inches (mm)		+ .01” (+.25mm)			
SR-CD09AA-CP	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	1.14 (29)	.59 (15)	.75 (19)
SR-CD11AA-CP	.24 - .39 (6 - 10)	**PG 11**	.73 (18.5)	1.28 (32.5)	.59 (15)	.87 (22)
SR-CD13AA-CP	.24 - .47 (6 -12)	**PG 13**	.80 (20.3)	1.40 (35.5)	.59 (15)	.94 (24)
SR-CD16AA-CP	.39 - .55 (10 -14)	**PG 16**	.88 (22.3)	1.48 (37.5)	.39 (10)	1.06 (27)
SR-CD21AA-CP	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	1.61 (41)	.43 (11)	1.30 (33)
SR-CD29AA-CP	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.93 (49)	.43 (11)	1.65 (42)
SR-CD36AA-CP	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	2.28 (58)	.51 (13)	2.09 (53)
SR-CD42AA-CP	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	2.42 (61.5)	.51 (13)	2.36 (60)
SR-CD48AA-CP	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	2.44 (62)	.55 (14)	2.56 (65)
SR-CD16MA-CP	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	1.14 (29)	.59 (15)	.75 (19)
SR-CD20MA-CP	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	1.40 (35.5)	.59 (15)	.94 (24)
SR-CD25MA-CP	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.61 (41)	.43 (11)	1.30 (33)
SR-CD32MA-CP	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.93 (49)	.43 (11)	1.65 (42)
SR-CD40MA-CP	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	2.28 (58)	.51 (13)	2.09 (53)
SR-CD50MA-CP	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	2.42 (61.5)	.51 (13)	2.36 (60)
SR-CD63MA-CP	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	2.44 (62)	.55 (14)	2.56 (65) / 2.68 (68)

Liquid Tight Strain Relief Fitting with Anodized Aluminum Clamp for extra Pull-out Resistance



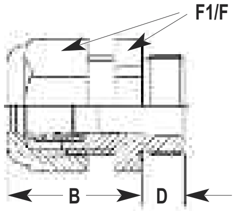


Suggested Clearance Hole for Non-Threaded Mounting

Hummel Nylon Liquid Tight Strain Relief Fittings

ROMEX® - PG/NPT/Metric Threads

- Strain Relief Fittings with Inserts for Flat Cables. They are made of Nylon with Buna-N form seal and are resistant to salt water, weak acids, weak alkalis, alcohol, ether, esters, ketones, mineral, animal and vegetable oils. Non-corrosive and suitable for direct burial installation. These form seals fit Strain Relief Fittings made of other materials. (Nickel Plated Brass, Stainless Steel, etc.)



High Performance Fittings with Clamp

PART NUMBERS		THREAD TYPE & SIZE	SLOT SIZE	DIMENSIONS IN INCHES (mm)			
Black	Gray	See page 49 for thread specs		**A** Clearance Hole	**B** Body Length	**D** Thread Length	**F1/F** Wrench Flats
				+ .01” (+.25mm)			
SR-CD16AS-01 SR-CD16AS-03 SR-CD16AS-05	SR-CD16AS-02 SR-CD16AS-04 SR-CD16AS-06	**PG 16**	.24 x .55 (6 x 14) .20 x .45 (5 x 11.5) .28 x .47 (7 x 12)	.88 (22.3)	1.10 (28)	.39 (10)	1.06 (27)
SR-CD21AS-01 SR-CD21AS-03	SR-CD21AS-02 SR-CD21AS-04	**PG 21**	.24 x .55 (6 x 14) .28 x .55 (7 x 14)	1.12 (28.4)	1.22 (31)	.43 (11)	1.30 (33)
SR-CD16NS-01 SR-CD16NS-03 SR-CD16NS-05	SR-CD16NS-02 SR-CD16NS-04 SR-CD16NS-06	**1/2” NPT**	.24 x .55 (6 x 14) .20 x .45 (5 x 11.5) .28 x .47 (7 x 12)	.83 (21.1)	1.10 (28)	.51 (13)	1.06 (27)
SR-CD21NS-01 SR-CD21NS-03	SR-CD21NS-02 SR-CD21NS-04	**3/4” NPT**	.24 x .55 (6 x 14) .28 x .55 (7 x 14)	1.05 (26.7)	1.22 (31)	.55 (14)	1.30 (33)
SR-CD20MS-01 SR-CD20MS-03 SR-CD20MS-05	SR-CD20MS-02 SR-CD20MS-04 SR-CD20MS-06	**M20 x 1.5**	.24 x .55 (6 x 14) .20 x .45 (5 x 11.5) .28 x .47 (7 x 12)	.79 (20)	1.10 (28)	.35 (9)	1.06 (27)
SR-CD25MS-01 SR-CD25MS-03	SR-CD25MS-02 SR-CD25MS-04	**M25 x 1.5**	.24 x .55 (6 x 14) .28 x .55 (7 x 14)	.98 (25)	1.22 (31)	.43 (11)	1.30 (33)

Hummel Nylon Liquid Tight Strain Relief Fittings

Multi-Hole - PG Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black	Gray	See page 49 for thread specs	No. of Holes	Diameter of Holes mm	Inches
SR-CD07AP-BK	SR-CD07AP-GY	PG 7 / 1/4” NPT	SOLID INSERT		
SR-CD09A1-BK	SR-CD09A1-GY	PG 9	4	1.4	.06
SR-CD09A2-BK	SR-CD09A2-GY		2	3.0	.12
SR-CD09A3-BK	SR-CD09A3-GY		5	1.6	.06
SR-CD09A4-BK	SR-CD09A4-GY		2	1.7	.07
SR-CD09A5-BK	SR-CD09A5-GY		10	1.4	.06
SR-CD09A6-BK	SR-CD09A6-GY		6	1.4	.06
SR-CD09A7-BK	SR-CD09A7-GY		3	1.7	.07
SR-CD09A8-BK	SR-CD09A8-GY		4	1.7	.07
SR-CD09A9-BK	SR-CD09A9-GY		4	2.3	.09
SR-CD09AP-BK	SR-CD09AP-GY		SOLID INSERT		
SR-CD11A1-BK	SR-CD11A1-GY	PG 11	2	3.0	.12
SR-CD11A2-BK	SR-CD11A2-GY		3	3.0	.12
SR-CD11A3-BK	SR-CD11A3-GY		2	4.0	.16
SR-CD11A4-BK	SR-CD11A4-GY		3	1.5	.06
SR-CD11A5-BK	SR-CD11A5-GY		4	2.8	.11
SR-CD11AP-BK	SR-CD11AP-GY		SOLID INSERT		
SR-CD13A1-BK	SR-CD13A1-GY	PG 13	3	2.0	.08
SR-CD13A2-BK	SR-CD13A2-GY		6	3.0	.12
SR-CD13A3-BK	SR-CD13A3-GY		3	4.0	.16
SR-CD13A4-BK	SR-CD13A4-GY		2	5.0	.20
SR-CD13A5-BK	SR-CD13A5-GY		3	3.0	.12
SR-CD13A6-BK	SR-CD13A6-GY		2	5.2	.20
SR-CD13A7-BK	SR-CD13A7-GY		2	3.8	.15
SR-CD13A8-BK	SR-CD13A8-GY		2	4.2	.17
SR-CD13A9-BK	SR-CD13A9-GY		2	2.5	.10
SR-CD13AP-BK	SR-CD13AP-GY		SOLID INSERT		
SR-CD16A1-BK	SR-CD16A1-GY	PG 16	3	3.0	.12
SR-CD16A2-BK	SR-CD16A2-GY		3	4.0	.16
SR-CD16A3-BK	SR-CD16A3-GY		4	4.0	.16
SR-CD16A4-BK	SR-CD16A4-GY		5	4.0	.16
SR-CD16A5-BK	SR-CD16A5-GY		6	4.0	.16
SR-CD16A6-BK	SR-CD16A6-GY		2	6.0	.24
SR-CD16A7-BK	SR-CD16A7-GY		3	5.6	.22
SR-CD16A8-BK	SR-CD16A8-GY		6	3.0	.12
SR-CD16A9-BK	SR-CD16A9-GY		4	3.0	.12
SR-CD16A0-BK	SR-CD16A0-GY		6	3.8	.15
SR-CD16AP-BK	SR-CD16AP-GY		SOLID INSERT		

*Note: This Insert has slotted holes.

Silcone

Multi-Hole Inserts are available in Silicone and Viton® upon request.

Viton®

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black	Gray	See page 49 for thread specs	No. of Holes	Diameter of Holes mm	Inches
SR-CD21A1-BK	SR-CD21A1-GY	PG 21	4	6.0	.24
SR-CD21A2-BK	SR-CD21A2-GY		3	7.0	.28
SR-CD21A3-BK	SR-CD21A3-GY		2	8.0	.31
SR-CD21A4-BK	SR-CD21A4-GY		4	5.0	.20
SR-CD21A5-BK	SR-CD21A5-GY		1	8.0	.31
SR-CD21A6-BK	SR-CD21A6-GY		4	5.2	.20
SR-CD21A7-BK	SR-CD21A7-GY		3	5.2	.20
SR-CD21A8-BK	SR-CD21A8-GY		4/1	5.2/3.7	.20/.15
SR-CD21A9-BK	SR-CD21A9-GY		2	7.4	.29
SR-CD21AP-BK	SR-CD21AP-GY		SOLID INSERT		
SR-CD29A1-BK	SR-CD29A1-GY	PG 29	6	6.5	.26
SR-CD29A2-BK	SR-CD29A2-GY		4	9.0	.35
SR-CD29A3-BK	SR-CD29A3-GY		4	9.5	.37
SR-CD29AP-BK	SR-CD29AP-GY		SOLID INSERT		
SR-CD36A1-BK	SR-CD36A1-GY	PG 36	5	9.0	.35
SR-CD36A2-BK	SR-CD36A2-GY		7	9.0	.35
SR-CD36A3-BK	SR-CD36A3-GY		6	8.0	.31
SR-CD36A4-BK	SR-CD36A4-GY		2	15.0	.59
SR-CD36AP-BK	SR-CD36AP-GY		SOLID INSERT		
SR-CD42A1-BK	SR-CD42A1-GY	PG 42	3	14.0	.55
SR-CD42AP-BK	SR-CD42AP-GY		SOLID INSERT		
SR-CD48A1-BK	SR-CD48A1-GY	PG 48	8	10.0	.39
SR-CD48A2-BK	SR-CD48A2-GY		6	12.0	.47
SR-CD48A3-BK	SR-CD48A3-GY		3	18.0	.71
SR-CD48AP-BK	SR-CD48AP-GY		SOLID INSERT		

Fittings with Multi-Hole Inserts are also available with Flex Nut.

To order, substitute “CF” for “CD”
(e.g. CD09A1-BK becomes CF09A1-BK)

For specifications and dimensions see page 4 where the appropriate Fittings are listed.

Hummel Nylon Liquid Tight Strain Relief Fittings

Multi-Hole - NPT Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black	Gray	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD07AP-BK	SR-CD07AP-GY	**PG 7 / 4" NPT**	SOLID INSERT		
SR-CD09N1-BK	SR-CD09N1-GY	**3/8" NPT**	4	1.4	.06
SR-CD09N2-BK	SR-CD09N2-GY		2	3.0	.12
SR-CD09N3-BK	SR-CD09N3-GY		5	1.6	.06
SR-CD09N4-BK	SR-CD09N4-GY		2	1.7	.07
SR-CD09N5-BK	SR-CD09N5-GY		10	1.4	.06
SR-CD09N6-BK	SR-CD09N6-GY		6	1.4	.06
SR-CD09N7-BK	SR-CD09N7-GY		3	1.7	.07
SR-CD09N8-BK	SR-CD09N8-GY		4	1.7	.07
SR-CD09N9-BK	SR-CD09N9-GY		4	2.3	.09
SR-CD09NP-BK	SR-CD09NP-GY		SOLID INSERT		
SR-CD13N1-BK	SR-CD13N1-GY	**1/2" NPT**	3	2.0	.08
SR-CD13N2-BK	SR-CD13N2-GY		6	3.0	.12
SR-CD13N3-BK	SR-CD13N3-GY		3	4.0	.16
SR-CD13N4-BK	SR-CD13N4-GY		2	5.0	.20
SR-CD13N5-BK	SR-CD13N5-GY		3	3.0	.12
SR-CD13N6-BK	SR-CD13N6-GY		2	5.2	.20
SR-CD13N7-BK	SR-CD13N7-GY		2	3.8	.15
SR-CD13N8-BK	SR-CD13N8-GY		2	4.2	.17
SR-CD13N9-BK	SR-CD13N9-GY		2	2.5	.10
SR-CD13NP-BK	SR-CD13NP-GY		SOLID INSERT		
SR-CD16N1-BK	SR-CD16N1-GY	**1/2" NPT (Enlarged)**	3	3.0	.12
SR-CD16N2-BK	SR-CD16N2-GY		3	4.0	.16
SR-CD16N3-BK	SR-CD16N3-GY		4	4.0	.16
SR-CD16N4-BK	SR-CD16N4-GY		5	4.0	.16
SR-CD16N5-BK	SR-CD16N5-GY		6	4.0	.16
SR-CD16N6-BK	SR-CD16N6-GY		2	6.0	.24
SR-CD16N7-BK	SR-CD16N7-GY		3	5.6	.22
SR-CD16N8-BK	SR-CD16N8-GY		6	3.0	.12
SR-CD16N9-BK	SR-CD16N9-GY		4	3.0	.12
SR-CD16N0-BK	SR-CD16N0-GY		6	3.8	.15
SR-CD16NP-BK	SR-CD16NP-GY		SOLID INSERT		

*Note: This Insert has slotted holes.

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black	Gray	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD21N1-BK	SR-CD21N1-GY	**3/4" NPT**	4	6.0	.24
SR-CD21N2-BK	SR-CD21N2-GY		3	7.0	.28
SR-CD21N3-BK	SR-CD21N3-GY		2	8.0	.31
SR-CD21N4-BK	SR-CD21N4-GY		4	5.0	.20
SR-CD21N5-BK	SR-CD21N5-GY		1	8.0	.31
SR-CD21N6-BK	SR-CD21N6-GY		4	5.2	.20
SR-CD21N7-BK	SR-CD21N7-GY		3	5.2	.20
SR-CD21N8-BK	SR-CD21N8-GY		4/1	5.2/3.7	.20/.15
SR-CD21N9-BK	SR-CD21N9-GY		2	7.4	.29
SR-CD21NP-BK	SR-CD21NP-GY		SOLID INSERT		
SR-CD29N1-BK	SR-CD29N1-GY	**1" NPT**	6	6.5	.26
SR-CD29N2-BK	SR-CD29N2-GY		4	9.0	.35
SR-CD29N3-BK	SR-CD29N3-GY		4	9.5	.37
SR-CD29NP-BK	SR-CD29NP-GY		SOLID INSERT		
SR-CD29L1-BK	SR-CD29L1-GY	**1-1/4" NPT**	6	6.5	.26
SR-CD29L2-BK	SR-CD29L2-GY		4	9.0	.35
SR-CD29L3-BK	SR-CD29L3-GY		4	9.5	.37
SR-CD29LP-BK	SR-CD29LP-GY		SOLID INSERT		
SR-CD36N1-BK	SR-CD36N1-GY	**1-1/2" NPT**	5	9.0	.35
SR-CD36N2-BK	SR-CD36N2-GY		7	9.0	.35
SR-CD36N3-BK	SR-CD36N3-GY		6	8.0	.31
SR-CD36N4-BK	SR-CD36N4-GY		2	15.0	.59
SR-CD36NP-BK	SR-CD36NP-GY		SOLID INSERT		

For specifications and dimensions see page 4 where the appropriate Fittings are listed.

Silcone

Viton®

Multi-Hole Inserts are available in Silicone and Viton® upon request.

Fittings with Multi-Hole Inserts are also available with Flex Nut.

- To order, substitute "CF" for "CD" (e.g. CD09N1-BK becomes CF09N1-BK)

Custom Solutions! - at no extra charge!

- Any special insert hole or profile configuration is available for a 1-time set-up fee & a minimum order of 1,000 pieces. For small quantities we suggest drilling or machining the inserts yourself, following these guidelines:
- We suggest drilling the frozen solid insert.
- Drill holes by using a standard high-speed steel drill bit of the proper size at approx. 2500 RPM.
- Drill holes with insert installed in Strain Relief Fitting as a fixture.
- Keep a distance of min. 1 mm (.04 in) between holes.
- The outside holes can be located right against the lip of the strain relief body, as sufficient insert material remains between the hole and the body wall due to the design of the cord grip.

Important:

Design Parameters: Cable diameter should not be less than 80% of hole diameter and the difference between hole and cable diameter should never exceed .04" (1 mm).
The Multi Cable fittings will meet NEMA 4x = IP65 if the design parameters are complied with. To verify a submersible NEMA 6= IP68 application, the final assembly of cables and fittings must be tested by the customer or submitted at the customer's expense to an independent test lab.

Hummel Nylon Liquid Tight Strain Relief Fittings

Multi-Hole - Metric Threads

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black	Gray	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD12MP-BK	SR-CD12MP-GY	**M12 x 1.5**	SOLID INSERT		
SR-CD16M1-BK	SR-CD16M1-GY	**M16 x 1.5**	4	1.4	.06
SR-CD16M2-BK	SR-CD16M2-GY		2	3.0	.12
SR-CD16M3-BK	SR-CD16M3-GY		5	1.6	.06
SR-CD16M4-BK	SR-CD16M4-GY		2	1.7	.07
SR-CD16M5-BK	SR-CD16M5-GY		10	1.4	.06
SR-CD16M6-BK	SR-CD16M6-GY		6	1.4	.06
SR-CD16M7-BK	SR-CD16M7-GY		3	1.7	.07
SR-CD16M8-BK	SR-CD16M8-GY		4	1.7	.07
SR-CD16M9-BK	SR-CD16M9-GY		4	2.3	.09
SR-CD16MP-BK	SR-CD16MP-GY		SOLID INSERT		
SR-CD17M1-BK	SR-CD17M1-GY	**M16 x 1.5 (Enlarged)**	2	3.0	.12
SR-CD17M2-BK	SR-CD17M2-GY		3	3.0	.12
SR-CD17M3-BK	SR-CD17M3-GY		2	4.0	.16
SR-CD17M4-BK	SR-CD17M4-GY		3	1.5	.06
SR-CD17M5-BK	SR-CD17M5-GY		4	2.8	.11
SR-CD17MP-BK	SR-CD17MP-GY		SOLID INSERT		
SR-CD20M1-BK	SR-CD20M1-GY	**M20 x 1.5**	3	2.0	.08
SR-CD20M2-BK	SR-CD20M2-GY		6	3.0	.12
SR-CD20M3-BK	SR-CD20M3-GY		3	4.0	.16
SR-CD20M4-BK	SR-CD20M4-GY		2	5.0	.20
SR-CD20M5-BK	SR-CD20M5-GY		3	3.0	.12
SR-CD20M6-BK	SR-CD20M6-GY		2	5.2	.20
SR-CD20M7-BK	SR-CD20M7-GY		2	3.8	.15
SR-CD20M8-BK	SR-CD20M8-GY		2	4.2	.17
SR-CD20M9-BK	SR-CD20M9-GY		2	2.5	.10
SR-CD20MP-BK	SR-CD20MP-GY		SOLID INSERT		
SR-CD22M1-BK	SR-CD22M1-GY	**M20 x 1.5 (Enlarged)**	3	3.0	.12
SR-CD22M2-BK	SR-CD22M2-GY		3	4.0	.16
SR-CD22M3-BK	SR-CD22M3-GY		4	4.0	.16
SR-CD22M4-BK	SR-CD22M4-GY		5	4.0	.16
SR-CD22M5-BK	SR-CD22M5-GY		6	4.0	.16
SR-CD22M6-BK	SR-CD22M6-GY		2	6.0	.24
SR-CD22M7-BK	SR-CD22M7-GY		3	5.6	.22
SR-CD22M8-BK	SR-CD22M8-GY		6	3.0	.12
SR-CD22M9-BK	SR-CD22M9-GY		4	3.0	.12
SR-CD22M0-BK	SR-CD22M0-GY		6	3.8	.15
SR-CD22MP-BK	SR-CD22MP-GY		SOLID INSERT		

*Note: This Insert has slotted holes.

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black	Gray	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD25M1-BK	SR-CD25M1-GY	**M25 x 1.5**	4	6.0	.24
SR-CD25M2-BK	SR-CD25M2-GY		3	7.0	.28
SR-CD25M3-BK	SR-CD25M3-GY		2	8.0	.31
SR-CD25M4-BK	SR-CD25M4-GY		4	5.0	.20
SR-CD25M5-BK	SR-CD25M5-GY		1	8.0	.31
SR-CD25M6-BK	SR-CD25M6-GY		4	5.2	.20
SR-CD25M7-BK	SR-CD25M7-GY		3	5.2	.20
SR-CD25M8-BK	SR-CD25M8-GY		4/1	5.2/3.7	.20/.15
SR-CD25M9-BK	SR-CD25M9-GY		2	7.4	.29
SR-CD25MP-BK	SR-CD25MP-GY		SOLID INSERT		
SR-CD32M1-BK	SR-CD32M1-GY	**M32 x 1.5**	6	6.5	.26
SR-CD32M2-BK	SR-CD32M2-GY		4	9.0	.35
SR-CD32M3-BK	SR-CD32M3-GY		4	9.5	.37
SR-CD32MP-BK	SR-CD32MP-GY		SOLID INSERT		
SR-CD40M1-BK	SR-CD40M1-GY	**M40 x 1.5**	5	9.0	.35
SR-CD40M2-BK	SR-CD40M2-GY		7	9.0	.35
SR-CD40M3-BK	SR-CD40M3-GY		6	8.0	.31
SR-CD40M4-BK	SR-CD40M4-GY		2	15.0	.59
SR-CD40MP-BK	SR-CD40MP-GY		SOLID INSERT		
SR-CD50M1-BK	SR-CD50M1-GY	**M50 x 1.5**	3	14.0	.55
SR-CD50MP-BK	SR-CD50MP-GY		SOLID INSERT		
SR-CD63M1-BK	SR-CD63M1-GY	**M63 x 1.5**	8	10.0	.39
SR-CD63M2-BK	SR-CD63M2-GY		6	12.0	.47
SR-CD63M3-BK	SR-CD63M3-GY		3	18.0	.71
SR-CD63MP-BK	SR-CD63MP-GY		SOLID INSERT		

Fittings with Multi-Hole Inserts are also available with Flex Nut.

To order, substitute “CF” for “CD”
(e.g. CD16M1-BK becomes CF16M1-BK)

How to feed a cable assembly with plug through a strain relief fitting:

- Determine largest dimension of the plug.
- Choose Strain Relief with appropriate Dome opening (see table on page 48).
- Drill solid insert to exact cable diameter & slice insert on one side only.
- Assemble by feeding Connector first through dome nut and Strain Relief body, snap insert over cable and insert into body, tighten dome nut. Done.
- This applies to PG, NPT or Metric solutions.

For specifications and dimensions see page 5 where the appropriate Fittings are listed.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

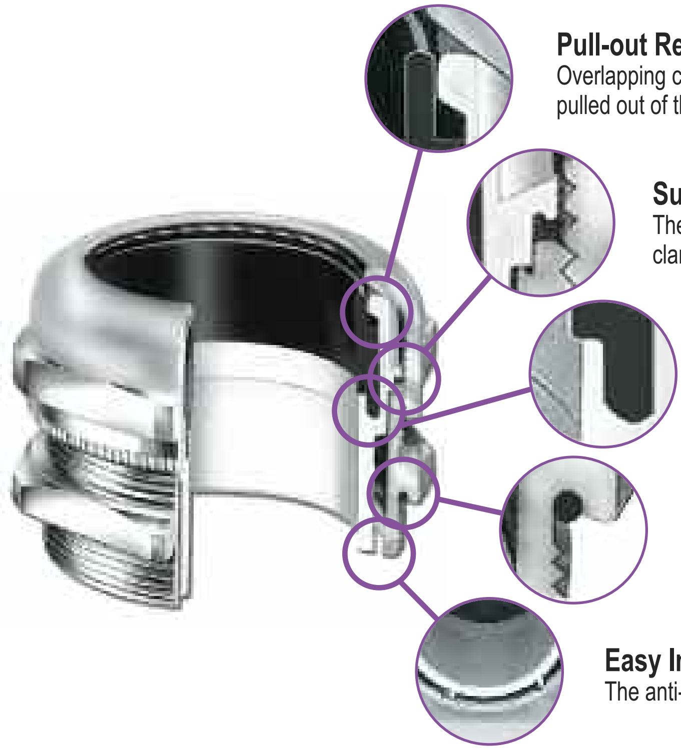
Features & Benefifits

Features & Benefits:

- Liquid Tight - submersible to 300 ft. - NEMA 4x & 6 (IP 68 / IP 69K)
- Highest pressure rating - Patented form seal meets 150 PSIG (10 bar)
- Flame protected - V0 rated according to UL 94
- Halogen- and Phosphorous free materials
- Safety - Ratchet to prevent Dome from coming loose under vibration
- Large selection - Cable Range from .08” (2 mm) to 3.54” (90 mm)
- Non-Corrosive - Resistant to salt water, weak acids, weak alkalis, alcohol, esters, ketones, ether, gasoline, mineral, animal & vegetable oil.
- Durable - Rugged Construction
- Environmentally compliant - RoHS & Deca BDE

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Your One Stop Solution For All Cable & Wire Accessories!



Pull-out Resistance & Cable Protection

Overlapping clamping splines apply a concentric force, thereby preventing the form seal from being pulled out of the fitting. This ensures pull-out protection without damage to the cable.

Submersible

The patented internal sealing edge results in a superior seal between the splined Nylon clamping insert and Nickel Plated Brass body.

Unique Product

The patented recess and high performance seal guarantees NEMA 4x & 6 (IP 68 / IP 69K) at 150 PSIG (10 bar).

Liquid Tight

Molded O-Ring Groove: All of our Nickel Plated Brass parts come with an O-Ring, which makes your application liquid tight, allowing submersion up to 300 ft.

Easy Installation

The anti-rotation grooves prevent cable rotation while tightening the nut.

Time Saving Installation

Simply push the cable through Strain Relief Fitting - tighten Dome or Flex Nut - Done!
No disassembly of the Fitting required: Insert Cable - Tighten Nut - Finished!

Standard, Reduced and Multi-Hole Inserts

Modularity: increase and decrease cable opening by swapping out inserts to accommodate various cable sizes & configurations.

Flex Nut

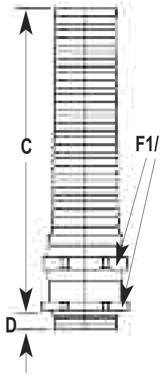
The Stainless Steel spring extension offers superior protection against kinking and chafing of the cable.

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

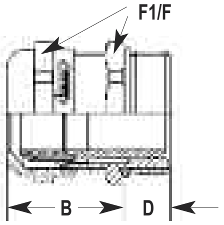
Standard - PG/NPT/Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE See page 49 for thread specs	DIMENSIONS IN INCHES (mm)				
Dome Fittings	Flex Fittings	Inches (mm)		A Clearance Hole + .01" (+.25mm)	B Body Length (Dome)	C Body Length (Flex)	D Thread Length	F1/F Wrench Flats
SR-CD07AA-BR	SR-CF07AA-BR	.12 - .26 (3 - 6.5)	**PG 7 / 1/4" NPT**	.49 (12.5)	.75 (19)	2.17 (55)	.20 (5)	.55 (14)
SR-CD07AR-BR	SR-CF07AR-BR	.08 - .20 (2 - 5)						
SR-CD09AA-BR	SR-CF09AA-BR	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.83 (21)	2.60 (66)	.24 (6)	.67 (17)
SR-CD09AR-BR	SR-CF09AR-BR	.08 - .24 (2 - 6)						
SR-CD11AA-BR	SR-CF11AA-BR	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.87 (22)	3.03 (77)	.24 (6)	.79 (20)
SR-CD11AR-BR	SR-CF11AR-BR	.12 - .28 (3 - 7)						
SR-CD13AA-BR	SR-CF13AA-BR	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	.94 (24)	3.46 (88)	.26 (6.5)	.87 (22)
SR-CD13AR-BR	SR-CF13AR-BR	.20 - .35 (5 - 9)						
SR-CD16AA-BR	SR-CF16AA-BR	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	.91 (23)	3.86 (98)	.26 (6.5)	.94 (24)
SR-CD16AR-BR	SR-CF16AR-BR	.28 - .47 (7 - 12)						
SR-CD21AA-BR	SR-CF21AA-BR	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	.94 (24)	4.37 (111)	.28 (7)	1.18 (30)
SR-CD21AR-BR	SR-CF21AR-BR	.35 - .63 (9 - 16)						
SR-CD29AA-BR	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.14 (29)	-	.31 (8)	1.57 (40)
SR-CD29AR-BR	-	.51 - .79 (13 - 20)						
SR-CD36AA-BR	-	.87 - 1.26 (22 - 32)	**PG 36**	1.85(47)	1.38 (35)	-	.31 (8)	1.97 (50)
SR-CD36AR-BR	-	.79 - 1.02 (20 - 26)						
SR-CD42AA-BR	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.46 (37)	-	.35 (9)	2.24 (57)
SR-CD42AR-BR	-	.98 - 1.22 (25 - 31)						
SR-CD48AA-BR	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.50 (38)	-	.39 (10)	2.52 (64)
SR-CD48AR-BR	-	1.14 - 1.38 (29 - 35)						
SR-CD09NA-BR	SR-CF09NA-BR	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17.2)	.83 (21)	2.60 (66)	.59 (15)	.67 (17) / .75 (19)
SR-CD09NR-BR	SR-CF09NR-BR	.08 - .24 (2 - 6)						
SR-CD13NA-BR	SR-CF13NA-BR	.24 - .47 (6 - 12)	**1/2" NPT**	.83 (21.1)	.94 (24)	3.46 (88)	.51 (13)	.87 (22) / .94 (24)
SR-CD13NR-BR	SR-CF13NR-BR	.20 - .35 (5 - 9)						
SR-CD16NA-BR	SR-CF16NA-BR	.39 - .55 (10 - 14)	**1/2" NPT**	.83 (21.1)	1.46 (37)	4.45 (113)	.51 (13)	.94 (24)
SR-CD16NR-BR	SR-CF16NR-BR	.28 - .47 (7 - 12)						
SR-CD21NA-BR	SR-CF21NA-BR	.51 - .71 (13 - 18)	**3/4" NPT**	1.05 (26.7)	.98 (25)	4.37 (111)	.51 (13)	1.18 (30)
SR-CD21NR-BR	SR-CF21NR-BR	.35 - .63 (9 - 16)						
SR-CD29NA-BR	-	.71 - .98 (18 - 25)	**1" NPT**	1.35 (34.3)	1.14 (29)	-	.75 (19)	1.57 (40)
SR-CD29NR-BR	-	.51 - .79 (13 - 20)						
SR-CD12MA-BR	SR-CF12MA-BR	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.75 (19)	2.17 (55)	.26 (6.5)	.55 (14)
SR-CD12MR-BR	SR-CF12MR-BR	.08 - .20 (2 - 5)						
SR-CD16MA-BR	SR-CF16MA-BR	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	.83 (21)	2.60 (66)	.24 (6)	.67 (17) / .75 (19)
SR-CD16MR-BR	SR-CF16MR-BR	.08 - .24 (2 - 6)						
SR-CD17MA-BR	SR-CF17MA-BR	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	.87 (22)	3.03 (77)	.24 (6)	.79 (20)
SR-CD17MR-BR	SR-CF17MR-BR	.12 - .28 (3 - 7)						
SR-CD20MA-BR	SR-CF20MA-BR	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	.91 (23)	3.46 (88)	.24 (6)	.87 (22)
SR-CD20MR-BR	SR-CF20MR-BR	.20 - .35 (5 - 9)						
SR-CD22MA-BR	SR-CF22MA-BR	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	.94 (24)	3.86 (98)	.24 (6)	.94 (24)
SR-CD22MR-BR	SR-CF22MR-BR	.28 - .47 (7 - 12)						
SR-CD25MA-BR	SR-CF25MA-BR	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.02 (26)	4.37 (111)	.28 (7)	1.18 (30)
SR-CD25MR-BR	SR-CF25MR-BR	.35 - .63 (9 - 16)						
SR-CD32MA-BR	-	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.22 (31)	-	.31 (8)	1.57 (40)
SR-CD32MR-BR	-	.51 - .79 (13 - 20)						
SR-CD40MA-BR	-	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.46 (37)	-	.31 (8)	1.97 (50)
SR-CD40MR-BR	-	.79 - 1.02 (20 - 26)						
SR-CD50MA-BR	-	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	1.46 (37)	-	.35 (9)	2.24 (57)
SR-CD50MR-BR	-	.98 - 1.22 (25 - 31)						
SR-CD63MA-BR	-	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	1.50 (38)	-	.39 (10)	2.52 (64) / 2.68 (68)
SR-CD63MR-BR	-	1.14 - 1.38 (29 - 35)						



Optional Locking Nuts & Other Accessories starting at page 28.



Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

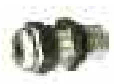
Mini WADI & WADI XL - PG & Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Mini WADI

WADI XL

MINI WADI

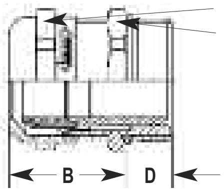
PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)			
Buna-N	Viton®			A	B	D	F1/F
		Inches (mm)	See page 49 for thread specs	Clearance Hole + .01" (+.25mm)	Body Length (Dome)	Thread Length	Wrench Flats
SR-CD07AW-BR	-	.08 - .18 (2 - 4.5)	**PG 7**	.56 (14.3)	.56 (14.3)	.14 (3.5)	.59 (15) / .43 (11)
SR-CD06MW-BR	SR-CD06MW-RV	.08 - .13 (2 - 3.2)	**M6 x 1**	.25 (6)	.39 (10)	.24 (6)	.31 (8)
SR-CD08MW-BR	SR-CD08MW-RV	.12 - .20 (3 - 5)	**M8 x 1.25**	.33 (8)	.51 (13)	.24 (6)	.43 (11)
SR-CD10MW-BR	-	.16 - .24 (4 - 6)	**M10 x 1.5**	.39 (10)	.55 (14)	.24 (6)	.47 (12)

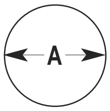
LOCKNUTS FOR MINI WADI

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
		G	H
	See page 49 for thread specs	Thickness	Wrench Flats
SR-NP-07-BR	**PG 7**	.11 (2.8)	.59 (15)
SR-NM-06-BR	**M6 x 1.0**	.10 (2.5)	.39 (10)
SR-NM-08-BR	**M8 x 1.25**	.10 (2.5)	.51 (13)
SR-NM-10-BR	**M10 x 1.5**	.11 (2.8)	.51 (13)

Mini WADI

Typical Mini Applications:
- Fiber optics
- Sensors
- Cameras
- Switches
- Small appliances

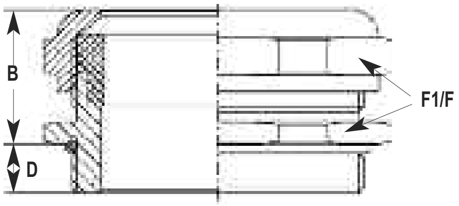


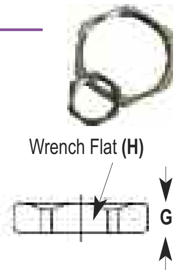


Suggested Clearance Hole for Non-Threaded Mounting

WADI XL

Typical XL Applications:
- Machine & Apparatus
- Automation
- Railroads
- Ship Building
- Off-shore
- Renewable Energy
- Utilities
- Nuclear Power





WADI XL

PART NUMBERS	CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)			
Buna-N			A	B	D	F1/F
	Inches (mm)	See page 49 for thread specs	Clearance Hole + .01" (+.25mm)	Body Length (Dome)	Thread Length	Wrench Flats
SR-CX63MA-BR	1.89 - 2.17 (48 - 55)	**M63 x 1.5**	2.48 (63)	1.65 (42)	.39 (10)	2.95 (75)
SR-CX75MA-BR	1.89 - 2.17 (48 - 55)	**M75 x 1.5**	2.95 (75)	1.65 (42)	.59 (15)	3.15 (80)
SR-CX75MB-BR	2.09 - 2.36 (53 - 60)					3.35 (85)
SR-CX80MA-BR	2.28 - 2.56 (58 - 65)	**M80 x 2**	3.15 (80)	1.65 (42)	.59 (15)	3.54 (90)
SR-CX90MA-BR	2.48 - 2.76 (63 - 70)	**M90 x 2**	3.54 (90)	1.65 (42)	.59 (15)	3.94 (100)
SR-CX90MB-BR	2.68 - 2.95 (68 - 75)					
SR-CX10MA-BR	2.87 - 3.15 (73 - 80)	**M100 x 2**	3.94 (100)	2.05 (52)	.79 (20)	4.33 (110)
SR-CX10MB-BR	3.07 - 3.35 (78 - 85)					
SR-CX11MA-BR	3.27 - 3.54 (83 - 90)	**M110 x 2**	4.33 (110)	2.05 (52)	.79 (20)	4.72 (120)
SR-CX52GA-BR	1.89 - 2.17 (48 - 55)	**G 2-1/2”**	2.96 (75.2)	1.65 (42)	.71 (18)	3.54 (90)
SR-CX52GB-BR	2.09 - 2.36 (53 - 60)					
SR-CX30GA-BR	2.28 - 2.56 (58 - 65)	**G 3”**	3.46 (87.9)	1.65 (42)	.71 (18)	3.94 (100)
SR-CX30GB-BR	2.48 - 2.76 (63 - 70)					4.13 (105)
SR-CX40GA-BR	2.68 - 2.95 (68 - 75)	**G4”**	4.45 (113)	2.05 (52)	.87 (22)	4.92 (125)
SR-CX40GB-BR	2.87 - 3.15 (73 - 80)					4.92 (125)
SR-CX40GC-BR	3.07 - 3.35 (78 - 85)			2.05 (52)	.87 (22)	4.92 (125)
SR-CX40GD-BR	3.27 - 3.54 (83 - 90)					5.12 (130)

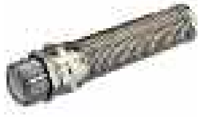
LOCKNUTS FOR WADI XL

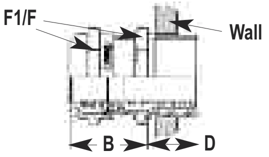
PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
		G	H
	See page 49 for thread specs	Thickness	Wrench Flats
SR-NM-63-XL	**M63 x 1.5**	.24 (6)	2.76 (70)
SR-NM-75-XL	**M75 x 1.5**	.32 (8)	3.35 (85)
SR-NM-80-XL	**M80 x 2**	.32 (8)	3.54 (90)
SR-NM-90-XL	**M90 x 2**	.32 (8)	3.94 (100)
SR-NM-10-XL	**M100 x 2**	.43 (11)	4.53 (115)
SR-NM-11-XL	**M110 x 2**	.43 (11)	4.92 (125)
SR-NG-52-XL	**G 2-1/2”**	.28 (7)	3.15 (80)
SR-NG-30-XL	**G 3”**	.32 (8)	3.74 (95)
SR-NG-40-XL	**G 4”**	.43 (11)	4.92 (125)

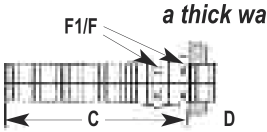
Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

Elongated - PG & Metric Threads

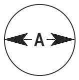
ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings 	Flex Fittings 	Inches (mm)	See page 49 for thread specs	A Clearance Hole + .01" (+.25mm)	B Body Length (Dome)	C Body Length (Flex)	D Thread Length	F1/F Wrench Flats
SR-CD07CA-BR	SR-CF07CA-BR	.12 - .26 (3 - 6.5)	**PG 7**	.49 (12.5)	.75 (19)	2.17 (55)	.39 (10)	.55 (14)
SR-CD07CR-BR	SR-CF07CR-BR	.08 - .20 (2 - 5)						
SR-CD09CA-BR	SR-CF09CA-BR	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.83 (21)	2.60 (66)	.39 (10)	.67 (17)
SR-CD09CR-BR	SR-CF09CR-BR	.08 - .24 (2 - 6)						
SR-CD11CA-BR	SR-CF11CA-BR	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.87 (22)	3.03 (77)	.39 (10)	.79 (20)
SR-CD11CR-BR	SR-CF11CR-BR	.12 - .28 (3 - 7)						
SR-CD13CA-BR	SR-CF13CA-BR	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	.94 (24)	3.46 (88)	.39 (10)	.87 (22)
SR-CD13CR-BR	SR-CF13CR-BR	.20 - .35 (5 - 9)						
SR-CD16CA-BR	SR-CF16CA-BR	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	.91 (23)	3.86 (98)	.39 (10)	.94 (24)
SR-CD16CR-BR	SR-CF16CR-BR	.28 - .47 (7 - 12)						
SR-CD21CA-BR	SR-CF21CA-BR	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	.94 (24)	4.37 (111)	.47 (12)	1.18 (30)
SR-CD21CR-BR	SR-CF21CR-BR	.35 - .63 (9 - 16)						
SR-CD29CA-BR	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.14 (29)	-	.47 (12)	1.57 (40)
SR-CD29CR-BR	-	.51 - .79 (13 - 20)						
SR-CD36CA-BR	-	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	1.38 (35)	-	.59 (15)	1.97 (50)
SR-CD36CR-BR	-	.79 - 1.02 (20 - 26)						
SR-CD42CA-BR	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.46 (37)	-	.59 (15)	2.24 (57)
SR-CD42CR-BR	-	.98 - 1.22 (25 - 31)						
SR-CD48CA-BR	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.50 (38)	-	.59 (15)	2.52 (64)
SR-CD48CR-BR	-	1.14 - 1.38 (29 - 35)						





Elongated is recommend where the Strain Relief has to pass through a thick wall or the application just needs the extra thread length.



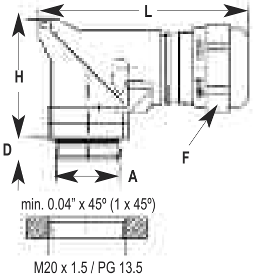
Suggested Clearance Hole for Non-Threaded Mounting

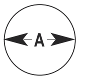
Dome Fittings	Flex Fittings	Inches (mm)	THREAD TYPE & SIZE	A	B	C	D	F1/F
SR-CD12DA-BR	SR-CF12DA-BR	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.75 (19)	2.17 (55)	.39 (10)	.55 (14)
SR-CD12DR-BR	SR-CF12DR-BR	.08 - .20 (2 - 5)						
SR-CD16DA-BR	SR-CF16DA-BR	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	.83 (21)	2.60 (66)	.39 (10)	.67 (17) /
SR-CD16DR-BR	SR-CF16DR-BR	.08 - .24 (2 - 6)						.75 (19)
SR-CD17DA-BR	SR-CF17DA-BR	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	.87 (22)	3.03 (77)	.39 (10)	.79 (20)
SR-CD17DR-BR	SR-CF17DR-BR	.12 - .28 (3 - 7)						
SR-CD20DA-BR	SR-CF20DA-BR	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	.91 (23)	3.46 (88)	.39 (10)	.87 (22)
SR-CD20DR-BR	SR-CF20DR-BR	.20 - .35 (5 - 9)						
SR-CD22DA-BR	SR-CF22DA-BR	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	.94 (24)	3.86 (98)	.39 (10)	.94 (24)
SR-CD22DR-BR	SR-CF22DR-BR	.28 - .47 (7 - 12)						
SR-CD25DA-BR	SR-CF25DA-BR	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.02 (26)	4.37 (111)	.47 (12)	1.18 (30)
SR-CD25DR-BR	SR-CF25DR-BR	.35 - .63 (9 - 16)						
SR-CD32DA-BR	-	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.22 (31)	-	.47 (12)	1.57 (40)
SR-CD32DR-BR	-	.51 - .79 (13 - 20)						
SR-CD40DA-BR	-	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.46 (37)	-	.59 (15)	1.97 (50)
SR-CD40DR-BR	-	.79 - 1.02 (20 - 26)						
SR-CD50DA-BR	-	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	1.46 (37)	-	.59 (15)	2.24 (57)
SR-CD50DR-BR	-	.98 - 1.22 (25 - 31)						
SR-CD63DA-BR	-	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	1.50 (38)	-	.59 (15)	2.52 (64) /
SR-CD63DR-BR	-	1.14 - 1.38 (29 - 35)						2.68 (68)

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

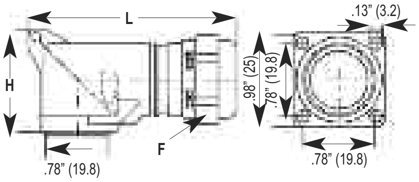
90º Snap Elbow - PG & Metric Threads / Flange

PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
w/ Connection Threads	w/ Mounting Flange			A Clearance Hole	H Body Height	L Body Length	D Thread Length	F Wrench Flats
		Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-ED20MA-BR	-	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	1.50 (38)	2.60 (66)	.30 (7.5)	.98 (25)
SR-ED20MR-BR		.28 - .47 (7 - 12)						
SR-ED13AA-BR	-	.39 - .55 (10 - 14)	**PG 13.5**	.80 (20.3)	1.50 (38)	2.60 (66)	.30 (7.5)	.98 (25)
SR-ED13AR-BR	-	.28 - .47 (7 - 12)						
-	SR-ED20FA-BR	.39 - .55 (10 - 14)	**Flange**	.79 (20)	1.34 (34)	2.60 (66)	-	.98 (25)
-	SR-ED20FR-BR	.28 - .47 (7 - 12)						





Suggested Clearance Hole for Non-Threaded Mounting

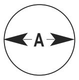


Robust - Compact - Low profile!

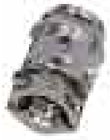
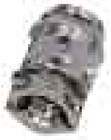
Secure your connection today with these flange or threaded Snap Elbows.
Saving on Space and Time during installation.
Quick & Easy Installation: Insert cable into open Elbow, Snap closed, tighten dome nut for a liquid tight connection. - Done!

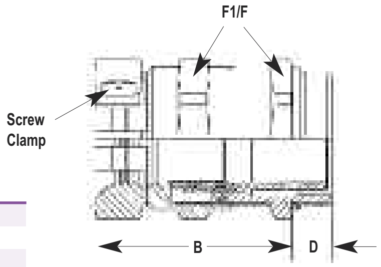
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Clamp High Performance - PG/NPT/Metric Threads

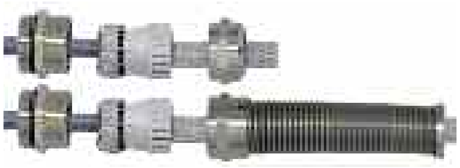


Suggested Clearance Hole for Non-Threaded Mounting

PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings	Flex Fittings			A Clearance Hole	H Body Height	L Body Length	D Thread Length	F Wrench Flats
		Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-CD07AA-MZ	SR-CD07CA-MZ	.12 - .26 (3 - 6.5)	**PG 7**	.49 (12.5)	1.02 (26)	.20 (5)	.39 (10)	.55 (14)
SR-CD09AA-MZ	SR-CD09CA-MZ	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	1.10 (28)	.24 (6)	.39 (10)	.67 (17)
SR-CD11AA-MZ	SR-CD11CA-MZ	.24 - .39 (6 - 10)	**PG 11**	.73 (18.5)	1.18 (30)	.24 (6)	.39 (10)	.79 (20)
SR-CD13AA-MZ	SR-CD13CA-MZ	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	1.30 (33)	.25 (6.5)	.39 (10)	.87 (22)
SR-CD16AA-MZ	SR-CD16CA-MZ	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	1.30 (33)	.25 (6.5)	.39 (10)	.94 (24)
SR-CD21AA-MZ	SR-CD21CA-MZ	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	1.46 (37)	.28 (7)	.47 (12)	1.18 (30)
SR-CD29AA-MZ	SR-CD29CA-MZ	.79 - .98 (20 - 25)	**PG 29**	1.47 (37.3)	1.69 (43)	.31 (8)	.47 (12)	1.57 (40)
SR-CD36AA-MZ	SR-CD36CA-MZ	.94 - 1.26 (24 - 32)	**PG 36**	1.85 (47)	1.97 (50)	.31 (8)	.59 (15)	1.97 (50)
SR-CD42AA-MZ	SR-CD42CA-MZ	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	2.01 (51)	.35 (9)	.59 (15)	2.24 (57)
SR-CD48AA-MZ	SR-CD48CA-MZ	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	2.05 (52)	.39 (10)	.59 (15)	2.52 (64)
SR-CD09NA-MZ	-	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17.2)	1.10 (28)	.59 (15)	-	.67 (17) / .75 (19)
SR-CD13NA-MZ	-	.28 - .47 (7 - 12)	**1/2" NPT**	.83 (21.1)	1.30 (33)	.51 (13)	-	.87 (22) / .94 (24)
SR-CD21NA-MZ	-	.51 - .71 (13 - 18)	**3/4" NPT**	1.05 (26.7)	1.46 (37)	.51 (13)	-	1.18 (30)
SR-CD29NA-MZ	-	.71 - .98 (18 - 25)	**1" NPT**	1.35 (34.3)	1.69 (43)	.75 (19)	-	1.57 (40)
SR-CD12MA-MZ	SR-CD12DA-MZ	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	1.02 (26)	.26 (6.5)	.39 (10)	.55 (14)
SR-CD16MA-MZ	SR-CD16DA-MZ	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	1.10 (28)	.24 (6)	.39 (10)	.75 (19)
SR-CD17MA-MZ	SR-CD17DA-MZ	.24 - .39 (6 - 10)	**M16 x 1.5**	.63 (16)	1.18 (30)	.24 (6)	.39 (10)	.79 (20)
SR-CD20MA-MZ	SR-CD20DA-MZ	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	1.30 (33)	.24 (6)	.39 (10)	.87 (22)
SR-CD22MA-MZ	SR-CD22DA-MZ	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	1.30 (33)	.24 (6)	.39 (10)	.94 (24)
SR-CD25MA-MZ	SR-CD25DA-MZ	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.46 (37)	.28 (7)	.47 (12)	1.18 (30)
SR-CD32MA-MZ	SR-CD32DA-MZ	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.69 (43)	.31 (8)	.47 (12)	1.57 (40)
SR-CD40MA-MZ	SR-CD40DA-MZ	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.97 (50)	.31 (8)	.59 (15)	1.97 (50)
SR-CD50MA-MZ	SR-CD50DA-MZ	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	2.01 (51)	.35 (9)	.59 (15)	2.24 (57)
SR-CD50MR-MZ	SR-CD50DR-MZ	.98 - 1.22 (25 - 31)						
SR-CD63MA-MZ	SR-CD63DA-MZ	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	2.05 (52)	.39 (10)	.59 (15)	2.52 (64) /
SR-CD63MR-MZ	SR-CD63DR-MZ	1.14 - 1.38 (29 - 35)						2.68 (68)



High Performance Liquid Tight Strain Relief Fitting - The Clamping Nut provides extra Pull-out Resistance.

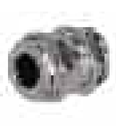


Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

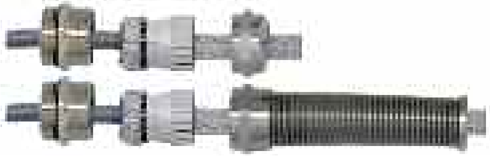
EMI/RFI Proof - PG/NPT/Metric & Elongated Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

EMI/RFI Proof - Grounded: Standard Version (-BE)

PART NUMBERS				CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)					
Dome Fittings **Standard**	Flex Fittings **Standard**	Dome Fittings **Elongated**	Flex Fittings **Elongated**			**A** Clearance Hole	**B** Body Length (Dome)	**C** Body Length (Flex)	**D** Thread Length	**D** Thread Length	**F1/F** Wrench Flats
				Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)			**Standard Thread**	**Elongated Thread**	
SR-CD07AA-BE	SR-CF07AA-BE	SR-CD07CA-BE	SR-CF07CA-BE	.12 - .26 (3 - 6.5)	**PG 7 /1/4" NPT**	.49 (12.5)	.75 (19)	2.17 (55)	.20 (5)	.39 (10)	.55 (14)
SR-CD07AR-BE	SR-CF07AR-BE	SR-CD07CR-BE	SR-CF07CR-BE	.08 - .20 (2 - 5)							
SR-CD09AA-BE	SR-CF09AA-BE	SR-CD09CA-BE	SR-CF09CA-BE	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.83 (21)	2.60 (66	.24 (6)	.39 (10)	.67 (17)
SR-CD09AR-BE	SR-CF09AR-BE	SR-CD09CR-BE	SR-CF09CR-BE	.08 - .24 (2 - 6)							
SR-CD11AA-BE	SR-CF11AA-BE	SR-CD11CA-BE	SR-CF11CA-BE	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.87 (22)	3.03 (77)	.24 (6)	.39 (10)	.79 (20)
SR-CD11AR-BE	SR-CF11AR-BE	SR-CD11CR-BE	SR-CF11CR-BE	.12 - .28 (3 - 7)							
SR-CD13AA-BE	SR-CF13AA-BE	SR-CD13CA-BE	SR-CF13CA-BE	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	.94 (24)	3.46 (88)	.26 (6.5)	.39 (10)	.87 (22)
SR-CD13AR-BE	SR-CF13AR-BE	SR-CD13CR-BE	SR-CF13CR-BE	.20 - .35 (5 - 9)							
SR-CD16AA-BE	SR-CF16AA-BE	SR-CD16CA-BE	SR-CF16CA-BE	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	.91 (23)	3.86 (98)	.26 (6.5)	.39 (10)	.94 (24)
SR-CD16AR-BE	SR-CF16AR-BE	SR-CD16CR-BE	SR-CF16CR-BE	.28 - .47 (7 - 12)							
SR-CD21AA-BE	SR-CF21AA-BE	SR-CD21CA-BE	SR-CF21CA-BE	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	.94 (24)	4.37 (111)	.28 (7)	.47 (12)	1.18 (30)
SR-CD21AR-BE	SR-CF21AR-BE	SR-CD21CR-BE	SR-CF21CR-BE	.35 - .63 (9 - 16)							
SR-CD29AA-BE	-	SR-CD29CA-BE	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.14 (29)	-	.31 (8)	.47 (12)	1.57 (40)
SR-CD29AR-BE	-	SR-CD29CR-BE	-	.51 - .79 (13 - 20)							
SR-CD36AA-BE	-	SR-CD36CA-BE	-	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	1.38 (35)	-	.31 (8)	.59 (15)	1.97 (50)
SR-CD36AR-BE	-	SR-CD36CR-BE	-	.79 - 1.02 (20 - 26)							
SR-CD42AA-BE	-	SR-CD42CA-BE	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.46 (37)	-	.35 (9)	.59 (15)	2.24 (57)
SR-CD42AR-BE	-	SR-CD42CR-BE	-	.98 - 1.22 (25 - 31)							
SR-CD48AA-BE	-	SR-CD48CA-BE	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.50 (38)	-	.39 (10)	.59 (15)	2.52 (64)
SR-CD48AR-BE	-	SR-CD48CR-BE	-	1.14 - 1.38 (29 - 35)							
SR-CD09NA-BE	SR-CF09NA-BE	-	-	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17.2)	.83 (21)	2.60 (66)	.59 (15)	-	.67 (17) / .75 (19)
SR-CD09NR-BE	SR-CF09NR-BE	-	-	.08 - .24 (2 - 6)							
SR-CD13NA-BE	SR-CF13NA-BE	-	-	.24 - .47 (6 - 12)	**1/2" NPT**	.83 (21.1)	.94 (24)	3.46 (88)	.51 (13)	-	.87 (22) / .94 (24)
SR-CD13NR-BE	SR-CF13NR-BE	-	-	.20 - .35 (5 - 9)							
SR-CD21NA-BE	SR-CF21NA-BE	-	-	.51 - .71 (13 - 18)	**3/4" NPT**	1.05 (26.7)	.98 (25)	4.37 (111)	.51 (13)	-	1.18 (30)
SR-CD21NR-BE	SR-CF21NR-BE	-	-	.35 - .63 (9 - 16)							
SR-CD12MA-BE	SR-CF12MA-BE	SR-CD12DA-BE	SR-CF12DA-BE	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.75 (19)	2.17 (55)	.26 (6.5)	.39 (10)	.55 (14)
SR-CD12MR-BE	SR-CF12MR-BE	SR-CD12DR-BE	SR-CF12DR-BE	.08 - .20 (2 - 5)							
SR-CD16MA-BE	SR-CF16MA-BE	SR-CD16DA-BE	SR-CF16DA-BE	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	.87 (22)	3.03 (77)	.24 (6)	.39 (10)	.79 (20)
SR-CD16MR-BE	SR-CF16MR-BE	SR-CD16DR-BE	SR-CF16DR-BE	.12 - .28 (3 - 7)							
SR-CD20MA-BE	SR-CF20MA-BE	SR-CD20DA-BE	SR-CF20DA-BE	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	.91 (23)	3.86 (98)	.24 (6)	.39 (10)	.94 (24)
SR-CD20MR-BE	SR-CF20MR-BE	SR-CD20DR-BE	SR-CF20DR-BE	.28 - .47 (7 - 12)							
SR-CD25MA-BE	SR-CF25MA-BE	SR-CD25DA-BE	SR-CF25DA-BE	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	.94 (24)	4.37 (111)	.28 (7)	.47 (12)	1.18 (30)
SR-CD25MR-BE	SR-CF25MR-BE	SR-CD25DR-BE	SR-CF25DR-BE	.35 - .63 (9 - 16)							
SR-CD32MA-BE	-	SR-CD32DA-BE	-	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.22 (31)	-	.31 (8)	.47 (12)	1.57 (40)
SR-CD32MR-BE	-	SR-CD32DR-BE	-	.51 - .79 (13 - 20)							
SR-CD40MA-BE	-	SR-CD40DA-BE	-	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.46 (37)	-	.31 (8)	.59 (15)	1.97 (50)
SR-CD40MR-BE	-	SR-CD40DR-BE	-	.79 - 1.02 (20 - 26)							
SR-CD50MA-BE	-	-	-	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	1.46 (37)	-	.35 (9)	-	2.24 (57)
SR-CD50MR-BE	-	-	-	.98 - 1.22 (25 - 31)							
SR-CD63MA-BE	-	-	-	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	1.50 (38)	-	.39 (10)	-	2.52 (64) / 2.68 (68)
SR-CD63MR-BE	-	-	-	1.14 - 1.38 (29 - 35)							

*Note: VDE Approval only applies to Fittings with Metric Thread. UL, UR & CSA Approval applies to Dome Fittings.

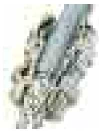
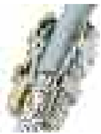


EMI/RFI Fittings are also available with High Performance Clamp or in Stainless Steel.

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

EMI/RFI Proof - PG/NPT/Metric & Elongated Threads

EMI/RFI Proof - Grounded: Feed-Through Version (-FE)

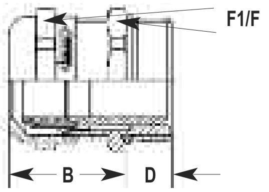
PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings **Standard** 	Dome Fittings **Elongated** 	Inches (mm)	See page 49 for thread specs	**A** Clearance Hole + .01" (+.25mm)	**B** Body Length	**D** Thread Length **Standard Thread**	**D** Thread Length **Elongated Thread**	**F1/F** Wrench Flats
SR-CD07AA-FE	-	.12 - .26 (3 - 6.5)	**PG 7 / 1/4" NPT**	.49 (12.5)	.94 (24)	.20 (5)	-	.55 (14)
SR-CD09AA-FE	-	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	1.10 (28)	.24 (6)	-	.67 (17)
SR-CD11AA-FE	-	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	1.14 (29)	.24 (6)	-	.79 (20)
SR-CD13AA-FE	-	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	1.22 (31)	.26 (6.5)	-	.87 (22)
SR-CD16AA-FE	-	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	1.26(32)	.26 (6.5)	-	.94 (24)
SR-CD21AA-FE	-	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	1.50 (38)	.28 (7)	-	1.18 (30)
SR-CD29AA-FE	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.69 (43)	.31 (8)	-	1.57 (40)
SR-CD36AA-FE	-	.94 - 1.26 (24 - 32)	**PG 36**	1.85 (47)	1.89 (48)	.31 (8)	-	1.97 (50)
SR-CD42AA-FE	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.77 (45)	.35 (9)	-	2.24 (57)
SR-CD48AA-FE	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.81 (46)	.39 (10)	-	2.52 (64)
SR-CD09NA-FE	-	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17)	1.14 (29)	.59 (15)	-	.67 (17) / .75 (19)
SR-CD13NA-FE	-	.24 - .47 (6 - 12)	**1/2" NPT**	.83 (21)	1.30 (33)	.51 (13)	-	.87 (22) / .94 (24)
SR-CD21NA-FE	-	.51 - .71 (13 - 18)	**3/4" NPT**	1.05 (27)	1.54 (39)	.51 (13)	-	1.18 (30)
SR-CD12MA-FE	SR-CD12DA-FE	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.98 (25)	.26 (6.5)	.39 (10)	.55 (14)
SR-CD16MA-FE	SR-CD16DA-FE	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	1.26 (32)	.24 (6)	.39 (10)	.79 (20)
SR-CD16MR-FE	SR-CD16DR-FE	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	1.14 (29)	.24 (6)	.39 (10)	.67 (17) / .75 (19)
SR-CD20MA-FE	SR-CD20DA-FE	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	1.30 (33)	.24 (6)	.39 (10)	.94 (24)
SR-CD20MR-FE	SR-CD20DR-FE	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	1.28 (32.5)	.24 (6)	.39 (10)	.87 (22)
SR-CD25MA-FE	SR-CD25DA-FE	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.54 (39)	.28 (7)	.47 (12)	1.18 (30)
SR-CD32MA-FE	SR-CD32DA-FE	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.77 (45)	.31 (8)	.47 (12)	1.57 (40)
SR-CD40MA-FE	SR-CD40DA-FE	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	2.01 (51)	.31 (8)	.59 (15)	1.97 (50)
SR-CD50MA-FE	-	1.26 - 1.50 (32 - 38)	**M50 x 1.5**	1.97 (50)	2.24 (57.5)	.35 (9)	-	2.24 (57)
SR-CD63MA-FE	-	1.46 - 1.73 (37 - 44)	**M63 x 1.5**	2.48 (63)	2.05 (52)	.39 (10)	-	2.52 (64) / 2.68 (68)

Feed-Through products are Quick, Reliable & Labor saving!

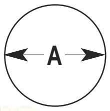
Partial Jacket Stripping

Total Jacket Removal

Fold Shield Over Jacket



ISO 9001:2000 Certified
CERTIFICATE # 08-511



Suggested Clearance Hole for Non-Threaded Mounting

Use our recommened EMI Locking Nuts with cutting edges which will cut through paint to ensure proper grounding. (see page 29)

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

Multi-Hole - PG Threads

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Dome Fittings	Flex Fittings	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD07AP-BR	SR-CF07AP-BR	PG 7 / 1/4" NPT	SOLID INSERT		
SR-CD09A1-BR	SR-CF09A1-BR	PG 9	4	1.4	.06
SR-CD09A2-BR	SR-CF09A2-BR		2	3.0	.12
SR-CD09A3-BR	SR-CF09A3-BR		5	1.6	.06
SR-CD09A4-BR	SR-CF09A4-BR		2	1.7	.07
SR-CD09A5-BR	SR-CF09A5-BR		10	1.4	.06
SR-CD09A6-BR	SR-CF09A6-BR		6	1.4	.06
SR-CD09A7-BR	SR-CF09A7-BR		3	1.7	.07
SR-CD09A8-BR	SR-CF09A8-BR		4	1.7	.07
SR-CD09A9-BR	SR-CF09A9-BR		4	2.3	.09
SR-CD09AP-BR	SR-CF09AP-BR		SOLID INSERT		
SR-CD11A1-BR	SR-CF11A1-BR	PG 11	2	3.0	.12
SR-CD11A2-BR	SR-CF11A2-BR		3	3.0	.12
SR-CD11A3-BR	SR-CF11A3-BR		2	4.0	.16
SR-CD11A4-BR	SR-CF11A4-BR		3	1.5	.06
SR-CD11A5-BR	SR-CF11A5-BR		4	2.8	.11
SR-CD11AP-BR	SR-CF11AP-BR		SOLID INSERT		
SR-CD13A1-BR	SR-CF13A1-BR	PG 13	3	2.0	.08
SR-CD13A2-BR	SR-CF13A2-BR		6	3.0	.12
SR-CD13A3-BR	SR-CF13A3-BR		3	4.0	.16
SR-CD13A4-BR	SR-CF13A4-BR		2	5.0	.20
SR-CD13A5-BR	SR-CF13A5-BR		3	3.0	.12
SR-CD13A6-BR	SR-CF13A6-BR		2	5.2	.20
SR-CD13A7-BR	SR-CF13A7-BR		2	3.8	.15
SR-CD13A8-BR	SR-CF13A8-BR		2	4.2	.17
SR-CD13A9-BR	SR-CF13A9-BR		2	2.5	.10
SR-CD13AP-BR	SR-CF13AP-BR		SOLID INSERT		
SR-CD16A1-BR	SR-CF16A1-BR	PG 16	3	3.0	.12
SR-CD16A2-BR	SR-CF16A2-BR		3	4.0	.16
SR-CD16A3-BR	SR-CF16A3-BR		4	4.0	.16
SR-CD16A4-BR	SR-CF16A4-BR		5	4.0	.16
SR-CD16A5-BR	SR-CF16A5-BR		6	4.0	.16
SR-CD16A6-BR	SR-CF16A6-BR		2	6.0	.24
SR-CD16A7-BR	SR-CF16A7-BR		3	5.6	.22
SR-CD16A8-BR	SR-CF16A8-BR		6	3.0	.12
SR-CD16A9-BR	SR-CF16A9-BR		4	3.0	.12
SR-CD16A0-BR	SR-CF16A0-BR		6	3.8	.15
SR-CD16AP-BR	SR-CF16AP-BR		SOLID INSERT		

*Note: This Insert has slotted holes.

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Dome Fittings	Flex Fittings	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD21A1-BR	SR-CF21A1-BR	PG 21	4	6.0	.24
SR-CD21A2-BR	SR-CF21A2-BR		3	7.0	.28
SR-CD21A3-BR	SR-CF21A3-BR		2	8.0	.31
SR-CD21A4-BR	SR-CF21A4-BR		4	5.0	.20
SR-CD21A5-BR	SR-CF21A5-BR		1	8.0	.31
SR-CD21A6-BR	SR-CF21A6-BR		4	5.2	.20
SR-CD21A7-BR	SR-CF21A7-BR		3	5.2	.20
SR-CD21A8-BR	SR-CF21A8-BR		4/1	5.2/3.7	.20/.15
SR-CD21A9-BR	SR-CF21A9-BR		2	7.4	.29
SR-CD21AP-BR	SR-CF21AP-BR		SOLID INSERT		
SR-CD29A1-BR	-	PG 29	6	6.5	.26
SR-CD29A2-BR	-		4	9.0	.35
SR-CD29A3-BR	-		4	9.5	.37
SR-CD29AP-BR	-		SOLID INSERT		
SR-CD36A1-BR	-	PG 36	5	9.0	.35
SR-CD36A2-BR	-		7	9.0	.35
SR-CD36A3-BR	-		6	8.0	.31
SR-CD36A4-BR	-		2	15.0	.59
SR-CD36AP-BR	-		SOLID INSERT		
SR-CD42A1-BR	-	PG 42	3	14.0	.55
SR-CD42AP-BR	-		SOLID INSERT		
SR-CD48A1-BR	-	PG 48	8	10.0	.39
SR-CD48A2-BR	-		6	12.0	.47
SR-CD48A3-BR	-		3	18.0	.71
SR-CD48AP-BR	-		SOLID INSERT		

For specifications and dimensions see page 14 where the appropriate Fittings are listed.

Silcone

Multi-Hole Inserts are available in Silicone and Viton® upon request.

Viton®

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

Multi-Hole - NPT Threads

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Dome Fittings	Flex Fittings	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD07AP-BK	SR-CF07AP-BR	**PG 7 / 4" NPT**	SOLID INSERT		
SR-CD09N1-BR	SR-CF09N1-BR	**3/8" NPT**	4	1.4	.06
SR-CD09N2-BR	SR-CF09N2-BR		2	3.0	.12
SR-CD09N3-BR	SR-CF09N3-BR		5	1.6	.06
SR-CD09N4-BR	SR-CF09N4-BR		2	1.7	.07
SR-CD09N5-BR	SR-CF09N5-BR		10	1.4	.06
SR-CD09N6-BR	SR-CF09N6-BR		6	1.4	.06
SR-CD09N7-BR	SR-CF09N7-BR		3	1.7	.07
SR-CD09N8-BR	SR-CF09N8-BR		4	1.7	.07
SR-CD09N9-BR	SR-CF09N9-BR		4	2.3	.09
SR-CD09NP-BR	SR-CF09NP-BR		SOLID INSERT		
SR-CD13N1-BR	SR-CF13N1-BR	**1/2" NPT**	3	2.0	.08
SR-CD13N2-BR	SR-CF13N2-BR		6	3.0	.12
SR-CD13N3-BR	SR-CF13N3-BR		3	4.0	.16
SR-CD13N4-BR	SR-CF13N4-BR		2	5.0	.20
SR-CD13N5-BR	SR-CF13N5-BR		3	3.0	.12
SR-CD13N6-BR	SR-CF13N6-BR		2	5.2	.20
SR-CD13N7-BR	SR-CF13N7-BR		2	3.8	.15
SR-CD13N8-BR	SR-CF13N8-BR		2	4.2	.17
SR-CD13N9-BR	SR-CF13N9-BR		2	2.5	.10
SR-CD13NP-BR	SR-CF13NP-BR		SOLID INSERT		
SR-CD16N1-BR	SR-CF16N1-BR	**1/2" NPT (Enlarged)**	3	3.0	.12
SR-CD16N2-BR	SR-CF16N2-BR		3	4.0	.16
SR-CD16N3-BR	SR-CF16N3-BR		4	4.0	.16
SR-CD16N4-BR	SR-CF16N4-BR		5	4.0	.16
SR-CD16N5-BR	SR-CF16N5-BR		6	4.0	.16
SR-CD16N6-BR	SR-CF16N6-BR		2	6.0	.24
SR-CD16N7-BR	SR-CF16N7-BR		3	5.6	.22
SR-CD16N8-BR	SR-CF16N8-BR		6	3.0	.12
SR-CD16N9-BR	SR-CF16N9-BR		4	3.0	.12
SR-CD16N0-BR	SR-CF16N0-BR		6	3.8	.15
SR-CD16NP-BR	SR-CF16NP-BR		SOLID INSERT		

*Note: This Insert has slotted holes.

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Dome Fittings	Flex Fittings	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD21N1-BR	SR-CF21N1-BR	**3/4" NPT**	4	6.0	.24
SR-CD21N2-BR	SR-CF21N2-BR		3	7.0	.28
SR-CD21N3-BR	SR-CF21N3-BR		2	8.0	.31
SR-CD21N4-BR	SR-CF21N4-BR		4	5.0	.20
SR-CD21N5-BR	SR-CF21N5-BR		1	8.0	.31
SR-CD21N6-BR	SR-CF21N6-BR		4	5.2	.20
SR-CD21N7-BR	SR-CF21N7-BR		3	5.2	.20
SR-CD21N8-BR	SR-CF21N8-BR		4/1	5.2/3.7	.20/.15
SR-CD21N9-BR	SR-CF21N9-BR		2	7.4	.29
SR-CD21NP-BR	SR-CF21NP-BR		SOLID INSERT		
SR-CD29N1-BR	-	**1" NPT**	6	6.5	.26
SR-CD29N2-BR	-		4	9.0	.35
SR-CD29N3-BR	-		4	9.5	.37
SR-CD29NP-BR	-		SOLID INSERT		
SR-CD29L1-BR	-	**1-1/4" NPT**	6	6.5	.26
SR-CD29L2-BR	-		4	9.0	.35
SR-CD29L3-BR	-		4	9.5	.37
SR-CD29LP-BR	-		SOLID INSERT		
SR-CD36N1-BR	-	**1-1/2" NPT**	5	9.0	.35
SR-CD36N2-BR	-		7	9.0	.35
SR-CD36N3-BR	-		6	8.0	.31
SR-CD36N4-BR	-		2	15.0	.59
SR-CD36NP-BR	-		SOLID INSERT		

For specifications and dimensions see page 14 where the appropriate Fittings are listed.

Silcone

Viton®

Multi-Hole Inserts are available in Silicone and Viton® upon request.

Custom Solutions! - at no extra charge!

Any special insert hole or profile configuration is available for a 1-time set-up fee & a minimum order of 1,000 pieces.
For small quantities we suggest drilling or machining the inserts yourself, following these guidelines:

- We suggest drilling the frozen solid insert.
- Drill holes by using a standard high-speed steel drill bit of the proper size at approx. 2500 RPM.
- Drill holes with insert installed in Strain Relief Fitting as a fixture.
- Keep a distance of min. 1 mm (.04 in) between holes.
- The outside holes can be located right against the lip of the strain relief body, as sufficient insert material remains between the hole and the body wall due to the design of the cord grip.

Important:

Design Parameters: Cable diameter should not be less than 80% of hole diameter and the difference between hole and cable diameter should never exceed .04" (1 mm).
The Multi Cable fittings will meet NEMA 4x = IP65 if the design parameters are complied with. To verify a submersible NEMA 6= IP68 application, the final assembly of cables and fittings must be tested by the customer or submitted at the customer's expense to an independent test lab.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Hummel Nickel Plated Brass Liquid Tight Strain Relief Fittings

Multi-Hole - Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Dome Fittings	Flex Fittings	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD12MP-BR	SR-CF12MP-GY	M12 x 1.5	SOLID INSERT		
SR-CD16M1-BR	SR-CF16M1-BR	M16 x 1.5	4	1.4	.06
SR-CD16M2-BR	SR-CF16M2-BR		2	3.0	.12
SR-CD16M3-BR	SR-CF16M3-BR		5	1.6	.06
SR-CD16M4-BR	SR-CF16M4-BR		2	1.7	.07
SR-CD16M5-BR	SR-CF16M5-BR		10	1.4	.06
SR-CD16M6-BR	SR-CF16M6-BR		6	1.4	.06
SR-CD16M7-BR	SR-CF16M7-BR		3	1.7	.07
SR-CD16M8-BR	SR-CF16M8-BR		4	1.7	.07
SR-CD16M9-BR	SR-CF16M9-BR		4	2.3	.09
SR-CD16MP-BR	SR-CF16MP-BR		SOLID INSERT		
SR-CD17M1-BR	SR-CF17M1-BR	M16 x 1.5 (Enlarged)	2	3.0	.12
SR-CD17M2-BR	SR-CF17M2-BR		3	3.0	.12
SR-CD17M3-BR	SR-CF17M3-BR		2	4.0	.16
SR-CD17M4-BR	SR-CF17M4-BR		3	1.5	.06
SR-CD17M5-BR	SR-CF17M5-BR		4	2.8	.11
SR-CD17MP-BR	SR-CF17MP-BR		SOLID INSERT		
SR-CD20M1-BR	SR-CF20M1-BR	M20 x 1.5	3	2.0	.08
SR-CD20M2-BR	SR-CF20M2-BR		6	3.0	.12
SR-CD20M3-BR	SR-CF20M3-BR		3	4.0	.16
SR-CD20M4-BR	SR-CF20M4-BR		2	5.0	.20
SR-CD20M5-BR	SR-CF20M5-BR		3	3.0	.12
SR-CD20M6-BR	SR-CF20M6-BR		2	5.2	.20
SR-CD20M7-BR	SR-CF20M7-BR		2	3.8	.15
SR-CD20M8-BR	SR-CF20M8-BR		2	4.2	.17
SR-CD20M9-BR	SR-CF20M9-BR		2	2.5	.10
SR-CD20MP-BR	SR-CF20MP-BR		SOLID INSERT		
SR-CD22M1-BR	SR-CF22M1-BR	M20 x 1.5 (Enlarged)	3	3.0	.12
SR-CD22M2-BR	SR-CF22M2-BR		3	4.0	.16
SR-CD22M3-BR	SR-CF22M3-BR		4	4.0	.16
SR-CD22M4-BR	SR-CF22M4-BR		5	4.0	.16
SR-CD22M5-BR	SR-CF22M5-BR		6	4.0	.16
SR-CD22M6-BR	SR-CF22M6-BR		2	6.0	.24
SR-CD22M7-BR	SR-CF22M7-BR		3	5.6	.22
SR-CD22M8-BR	SR-CF22M8-BR		6	3.0	.12
SR-CD22M9-BR	SR-CF22M9-BR		4	3.0	.12
SR-CD22M0-BR	SR-CF22M0-BR		6	3.8	.15
SR-CD22MP-BR	SR-CF22MP-BR		SOLID INSERT		

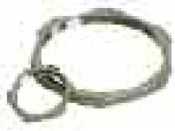
*Note: This Insert has slotted holes.

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Dome Fittings	Flex Fittings	See page 49 for thread specs	No. of Holes	Diameter of Holes	
				mm	Inches
SR-CD25M1-BR	SR-CF25M1-BR	M25 x 1.5	4	6.0	.24
SR-CD25M2-BR	SR-CF25M2-BR		3	7.0	.28
SR-CD25M3-BR	SR-CF25M3-BR		2	8.0	.31
SR-CD25M4-BR	SR-CF25M4-BR		4	5.0	.20
SR-CD25M5-BR	SR-CF25M5-BR		1	8.0	.31
SR-CD25M6-BR	SR-CF25M6-BR		4	5.2	.20
SR-CD25M7-BR	SR-CF25M7-BR		3	5.2	.20
SR-CD25M8-BR	SR-CF25M8-BR		4/1	5.2/3.7	.20/.15
SR-CD25M9-BR	SR-CF25M9-BR		2	7.4	.29
SR-CD25MP-BR	SR-CF25MP-BR		SOLID INSERT		
SR-CD32M1-BR	-	M32 x 1.5	6	6.5	.26
SR-CD32M2-BR	-		4	9.0	.35
SR-CD32M3-BR	-		4	9.5	.37
SR-CD32MP-BR	-		SOLID INSERT		
SR-CD40M1-BR	-	M40 x 1.5	5	9.0	.35
SR-CD40M2-BR	-		7	9.0	.35
SR-CD40M3-BR	-		6	8.0	.31
SR-CD40M4-BR	-		2	15.0	.59
SR-CD40MP-BR	-		SOLID INSERT		
SR-CD50M1-BR	-	M50 x 1.5	3	14.0	.55
SR-CD50MP-BR	-		SOLID INSERT		
SR-CD63M1-BR	-	M63 x 1.5	8	10.0	.39
SR-CD63M2-BR	-		6	12.0	.47
SR-CD63M3-BR	-		3	18.0	.71
SR-CD63MP-BR	-		SOLID INSERT		

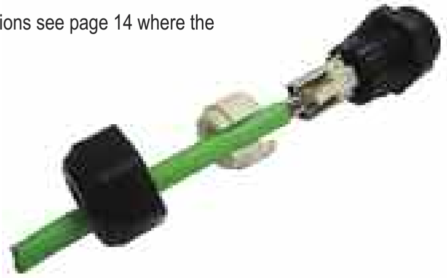
How to feed a cable assembly with plug through a strain relief fitting:

- Determine largest dimension of the plug.
- Choose Strain Relief with appropriate Dome opening (see table on page 48).
- Drill solid insert to exact cable diameter & slice insert on one side only.
- Assemble by feeding Connector first through dome nut and Strain Relief body, snap insert over cable and insert into body, tighten dome nut. Done.
- This applies to PG, NPT or Metric solutions.

For specifications and dimensions see page 14 where the appropriate Fittings are listed.



Optional Locking Nuts & Other Accessories starting at page 28.



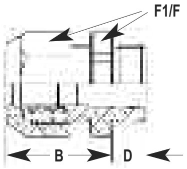
Hummel Nylon Liquid Tight Strain Relief Fittings

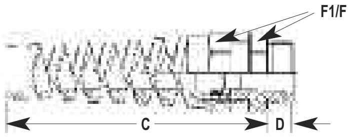
PVDF - Teflon® - PG/NPT/Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Viton® - High/Low Temperatures & Chemical Resistant

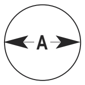
PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings	Flex Fittings			A Clearance Hole	B Body Length (Dome)	C Body Length (Flex)	D Thread Length	F1/F Wrench Flats
		Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)				
SR-CD07AA-TE	SR-CF07AA-TE	.12 - .26 (3 - 6.5)	**PG 7 / 1/4" NPT**	.49 (12.5)	.83 (21)	2.13 (54)	.31 (8)	.59 (15)
SR-CD07AR-TE	SR-CF07AR-TE	.08 - .20 (2 - 5)						
SR-CD09AA-TE	SR-CF09AA-TE	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.87 (22)	2.48 (63)	.31 (8)	.75 (19)
SR-CD09AR-TE	SR-CF09AR-TE	.08 - .24 (2 - 6)						
SR-CD11AA-TE	-	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.98 (25)	-	.31 (8)	.87 (22)
SR-CD11AR-TE	-	.12 - .28 (3 - 7)						
SR-CD13AA-TE	SR-CF13AA-TE	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	1.06 (27)	3.54 (90)	.35 (9)	.94 (24)
SR-CD13AR-TE	SR-CF13AR-TE	.20 - .35 (5 - 9)						
SR-CD16AA-TE	-	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	1.10 (28)	-	.39 (10)	1.06 (27)
SR-CD16AR-TE	-	.28 - .47 (7 - 12)						
SR-CD21AA-TE	-	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	1.22 (31)	-	.43 (11)	1.30 (33)
SR-CD21AR-TE	-	.35 - .63 (9 - 16)						
SR-CD29AA-TE	-	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.54 (39)	-	.43 (11)	1.65 (42)
SR-CD29AR-TE	-	.51 - .79 (13 - 20)						
SR-CD36AA-TE	-	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	1.89 (48)	-	.51 (13)	2.09 (53)
SR-CD36AR-TE	-	.79 - 1.02 (20 - 26)						
SR-CD42AA-TE	-	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.93 (49)	-	.51 (13)	2.36 (60)
SR-CD42AR-TE	-	.98 - 1.22 (25 - 31)						
SR-CD48AA-TE	-	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.93 (49)	-	.55 (14)	2.56 (65)
SR-CD48AA-TE	-	1.14 - 1.38 (29 - 35)						
SR-CD09NA-TE	SR-CF09NA-TE	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17.2)	.87 (22)	2.13 (54)	.59 (15)	.87 (22) / .75 (19)
SR-CD09NR-TE	SR-CF09NR-TE	.08 - .24 (2 - 6)						
SR-CD13NA-TE	SR-CF13NA-TE	.24 - .47 (6 - 12)	**1/2" NPT**	.83 (21.1)	1.06 (27)	2.48 (63)	.51 (13)	.94 (24)
SR-CD13NR-TE	SR-CF13NR-TE	.20 - .35 (5 - 9)						
SR-CD16NA-TE	-	.39 - .55 (10 - 14)	**1/2" NPT**	.83 (21.1)	1.10 (28)	-	.51 (13)	1.06 (27)
SR-CD16NR-TE	-	.28 - .47 (7 - 12)						
SR-CD21NA-TE	-	.51 - .71 (13 - 18)	**3/4" NPT**	1.05 (26.7)	1.22 (31)	-	.55 (14)	1.30 (33)
SR-CD21NR-TE	-	.35 - .63 (9 - 16)						
SR-CD12MA-TE	SR-CF12MA-TE	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.83 (21)	2.13 (54)	.31 (8)	.59 (15)
SR-CD12MR-TE	SR-CF12MR-TE	.08 - .20 (2 - 5)						
SR-CD16MA-TE	SR-CF16MA-TE	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	.87 (22)	2.48 (63)	.31 (8)	.75 (19)
SR-CD16MR-TE	SR-CF16MR-TE	.08 - .24 (2 - 6)						
SR-CD20MA-TE	SR-CF20MA-TE	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	1.06 (27)	3.54 (90)	.35 (9)	.94 (24)
SR-CD20MR-TE	SR-CF20MR-TE	.20 - .35 (5 - 9)						
SR-CD25MA-TE	-	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.22 (31)	-	.43 (11)	1.30 (33)
SR-CD25MR-TE	-	.35 - .63 (9 - 16)						
SR-CD32MA-TE	-	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.54 (39)	-	.43 (11)	1.65 (42)
SR-CD32MR-TE	-	.51 - .79 (13 - 20)						





Ideal for:

- Food & Beverage Industries
- Clean Room Applications
- High Temperature Applications



Suggested Clearance Hole for Non-Threaded Mounting

Optional Locking Nuts & Other Accessories starting at page 13-24.

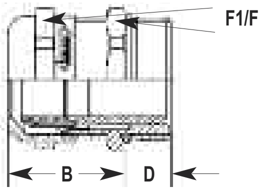
Hummel Liquid Tight Strain Relief Fittings

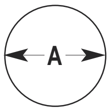
ISO 9001:2000 Certified
CERTIFICATE # 08-511

PVDF - Nickel Pl. Brass - PG/NPT/Metric & Elongated

Viton® - High/Low Temperatures & Chemical Resistant

PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)				
Dome Fittings **Standard Thread**	Dome Fittings **Elongated Thread**			**A** Clearance Hole	**B** Body Length	**D** Thread Length	**D** Thread Length	**F1/F** Wrench Flats
		Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)		**Standard Thread**	**Elongated Thread**	
SR-CD07AA-RV	SR-CD07CA-RV	.12 - .26 (3 - 6.5)	**PG 7 /**	.49 (12.5)	.75 (19)	.20 (5)	.39 (10)	.55 (14)
SR-CD07AR-RV	SR-CD07CR-RV	.08 - .20 (2 - 5)	**1/4" NPT**					
SR-CD09AA-RV	SR-CD09CA-RV	.16 - .31 (4 - 8)	**PG 9**	.60 (15.2)	.83 (21)	.24 (6)	.39 (10)	.67 (17)
SR-CD09AR-RV	SR-CD09CR-RV	.08 - .24 (2 - 6)						
SR-CD11AA-RV	SR-CD11CA-RV	.20 - .39 (5 - 10)	**PG 11**	.73 (18.5)	.87 (22)	.24 (6)	.39 (10)	.79 (20)
SR-CD11AR-RV	SR-CD11CR-RV	.12 - .28 (3 - 7)						
SR-CD13AA-RV	SR-CD13CA-RV	.24 - .47 (6 - 12)	**PG 13**	.80 (20.3)	.94 (24)	.26 (6.5)	.39 (10)	.87 (22)
SR-CD13AR-RV	SR-CD13CR-RV	.20 - .35 (5 - 9)						
SR-CD16AA-RV	SR-CD16CA-RV	.39 - .55 (10 - 14)	**PG 16**	.88 (22.3)	.91 (23)	.26 (6.5)	.47 (12)	.94 (24)
SR-CD16AR-RV	SR-CD16CR-RV	.28 - .47 (7 - 12)						
SR-CD21AA-RV	SR-CD21CA-RV	.51 - .71 (13 - 18)	**PG 21**	1.12 (28.4)	.94 (24)	.28 (7)	.47 (12)	1.18 (30)
SR-CD21AR-RV	SR-CD21CR-RV	.35 - .63 (9 - 16)						
SR-CD29AA-RV	SR-CD29CA-RV	.71 - .98 (18 - 25)	**PG 29**	1.47 (37.3)	1.14 (29)	.31 (8)	.47 (12)	1.57 (40)
SR-CD29AR-RV	SR-CD29CR-RV	.51 - .79 (13 - 20)						
SR-CD36AA-RV	SR-CD36CA-RV	.87 - 1.26 (22 - 32)	**PG 36**	1.85 (47)	1.38 (35)	.31 (8)	.59 (15)	1.97 (50)
SR-CD36AR-RV	SR-CD36CR-RV	.79 - 1.02 (20 - 26)						
SR-CD42AA-RV	SR-CD42CA-RV	1.26 - 1.50 (32 - 38)	**PG 42**	2.13 (54.1)	1.46 (37)	.35 (9)	.59 (15)	2.24 (57)
SR-CD42AR-RV	SR-CD42CR-RV	.98 - 1.22 (25 - 31)						
SR-CD48AA-RV	SR-CD48CA-RV	1.46 - 1.73 (37 - 44)	**PG 48**	2.34 (59.4)	1.50 (38)	.39 (10)	.59 (15)	2.52 (64)
SR-CD48AA-RV	SR-CD48CA-RV	1.14 - 1.38 (29 - 35)						
SR-CD09NA-RV	-	.16 - .31 (4 - 8)	**3/8" NPT**	.68 (17.2)	.83 (21)	.59 (15)	-	.67 (17) /
SR-CD09NR-RV	-	.08 - .24 (2 - 6)						.75 (19)
SR-CD13NA-RV	-	.24 - .47 (6 - 12)	**1/2" NPT**	.83 (21.1)	.94 (24)	.51 (13)	-	.87 (22) /
SR-CD13NR-RV	-	.20 - .35 (5 - 9)						.94 (24)
SR-CD21NA-RV	-	.51 - .71 (13 - 18)	**3/4" NPT**	.83 (21.1)	.98 (25)	.51 (13)	-	
SR-CD21NR-RV	-	.35 - .63 (9 - 16)						1.18 (30)
SR-CD12MA-RV	SR-CD12DA-RV	.12 - .26 (3 - 6.5)	**M12 x 1.5**	.47 (12)	.75 (19)	.26 (6.5)	.39 (10)	
SR-CD12MR-RV	SR-CD12DR-RV	.08 - .20 (2 - 5)						.55 (14)
SR-CD16MA-RV	SR-CD16DA-RV	.16 - .31 (4 - 8)	**M16 x 1.5**	.63 (16)	.83 (21)	.24 (6)	.39 (10)	
SR-CD16MR-RV	SR-CD16DR-RV	.08 - .24 (2 - 6)						.67 (17) /
SR-CD17MA-RV	SR-CD17DA-RV	.20 - .39 (5 - 10)	**M16 x 1.5**	.63 (16)	.87 (22)	.24 (6)	.39 (10)	.75 (19)
SR-CD17MR-RV	SR-CD17DR-RV	.12 - .28 (3 - 7)						.79 (20)
SR-CD20MA-RV	SR-CD20DA-RV	.24 - .47 (6 - 12)	**M20 x 1.5**	.79 (20)	.91 (23)	.24 (6)	.39 (10)	.87 (22)
SR-CD20MR-RV	SR-CD20DA-RV	.20 - .35 (5 - 9)						
SR-CD22MA-RV	SR-CD22DA-RV	.39 - .55 (10 - 14)	**M20 x 1.5**	.79 (20)	.94 (24)	.24 (6)	.39 (10)	.94 (24)
SR-CD22MR-RV	SR-CD22DR-RV	.28 - .47 (7 - 12)						
SR-CD25MA-RV	SR-CD25DA-RV	.51 - .71 (13 - 18)	**M25 x 1.5**	.98 (25)	1.02 (26)	.28 (7)	.47 (12)	1.18 (30)
SR-CD25MR-RV	SR-CD25DR-RV	.35 - .63 (9 - 16)						
SR-CD32MA-RV	SR-CD32DA-RV	.71 - .98 (18 - 25)	**M32 x 1.5**	1.26 (32)	1.22 (31)	.31 (8)	.47 (12)	1.57 (40)
SR-CD32MR-RV	SR-CD32DR-RV	.51 - .79 (13 - 20)						
SR-CD40MA-RV	SR-CD40DA-RV	.87 - 1.26 (22 - 32)	**M40 x 1.5**	1.57 (40)	1.46 (37)	.31 (8)	.59 (15)	1.97 (50)
SR-CD40MR-RV	SR-CD40DR-RV	.79 - 1.02 (20 - 26)						





Suggested Clearance Hole for Non-Threaded Mounting

- **High Performance**
- **Extreme Temperatures**
- **Sturdy**

Hummel Liquid Tight Strain Relief Fittings

303 Stainless Steel - PG/NPT/Metric Threads

High Performance, High/Low Temperatures & Corrosion Resistant

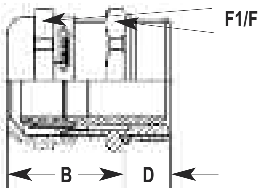
PART NUMBERS		CABLE RANGE	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)			
Standard	PVDF			A Clearance Hole	B Body Length (Dome)	D Thread Length	F1/F Wrench Flats
		Inches (mm)	See page 49 for thread specs	+ .01" (+.25mm)			
SR-CD07AA-SS SR-CD07AR-SS	SR-CD07AA-SV SR-CD07AR-SV	.12 - .26 (3 - 6.5) .08 - .20 (2 - 5)	**PG 7**	.49 (12.5)	.75 (19)	.20 (5)	.55 (14)
SR-CD09AA-SS SR-CD09AR-SS	SR-CD09AA-SV SR-CD09AR-SV	.16 - .31 (4 - 8) .08 - .24 (2 - 6)	**PG 9**	.60 (15.2)	.83 (21)	.24 (6)	.67 (17)
SR-CD11AA-SS SR-CD11AR-SS	SR-CD11AA-SV SR-CD11AR-SV	.20 - .39 (5 - 10) .12 - .28 (3 - 7)	**PG 11**	.73 (18.5)	.87 (22)	.24 (6)	.87 (22)
SR-CD13AA-SS SR-CD13AR-SS	SR-CD13AA-SV SR-CD13AR-SV	.24 - .47 (6 - 12) .20 - .35 (5 - 9)	**PG 13**	.80 (20.3)	.94 (24)	.26 (6.5)	.87 (22)
SR-CD16AA-SS SR-CD16AR-SS	SR-CD16AA-SV SR-CD16AR-SV	.39 - .55 (10 - 14) .28 - .47 (7 - 12)	**PG 16**	.88 (22.3)	.91 (23)	.26 (6.5)	.94 (24)
SR-CD21AA-SS SR-CD21AR-SS	SR-CD21AA-SV SR-CD21AR-SV	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	**PG 21**	1.12 (28.4)	.94 (24)	.28 (7)	1.18 (30)
SR-CD29AA-SS SR-CD29AR-SS	SR-CD29AA-SV SR-CD29AR-SV	.71 - .98 (18 - 25) .51 - .79 (13 - 20)	**PG 29**	1.47 (37.3)	1.14 (29)	.31 (8)	1.61 (41)
SR-CD36AA-SS SR-CD36AR-SS	SR-CD36AA-SV SR-CD36AR-SV	.87 - 1.26 (22 - 32) .79 - 1.02 (20 - 26)	**PG 36**	1.85 (47)	1.38 (35)	.31 (8)	1.97 (50)
SR-CD09NA-SS SR-CD09NR-SS	SR-CD09NA-SV SR-CD09NR-SV	.16 - .31 (4 - 8) .08 - .24 (2 - 6)	**3/8" NPT**	.68 (17.2)	.83 (21)	.59 (15)	.67 (17) / .75 (19)
SR-CD13NA-SS SR-CD13NR-SS	SR-CD13NA-SV SR-CD13NR-SV	.24 - .47 (6 - 12) .20 - .35 (5 - 9)	**1/2" NPT**	.83 (21.1)	.94 (24)	.51 (13)	.87 (22) / .94 (24)
SR-CD21NA-SS SR-CD21NR-SS	SR-CD21NA-SV SR-CD21NR-SV	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	**3/4" NPT**	1.05 (26.7)	.98 (25)	.51 (13)	1.18 (30)
SR-CD29NA-SS SR-CD29NR-SS	SR-CD29NA-SV SR-CD29NR-SV	.71 - .98 (18 - 25) .51 - .79 (13 - 20)	**1" NPT**	1.35 (34.3)	1.14 (29)	.75 (19)	1.57 (40)
SR-CD12MA-SS SR-CD12MR-SS	SR-CD12MA-SV SR-CD12MR-SV	.12 - .26 (3 - 6.5) .08 - .20 (2 - 5)	**M12 x 1.5**	.47 (12)	.75 (19)	.26 (6.5)	.55 (14)
SR-CD16MA-SS SR-CD16MR-SS	SR-CD16MA-SV SR-CD16MR-SV	.20 - .39 (5 - 10) .12 - .28 (3 - 7)	**M16 x 1.5**	.63 (16)	.87 (22)	.24 (6)	.87 (22)
SR-CD20MA-SS SR-CD20MR-SS	SR-CD20MA-SV SR-CD20MR-SV	.39 - .55 (10 - 14) .28 - .47 (7 - 12)	**M20 x 1.5**	.79 (20)	.91 (23)	.24 (6)	.94 (24)
SR-CD25MA-SS SR-CD25MR-SS	SR-CD25MA-SV SR-CD25MR-SV	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	**M25 x 1.5**	.98 (25)	.94 (24)	.28 (7)	1.18 (30)
SR-CD32MA-SS SR-CD32MR-SS	SR-CD32MA-SV SR-CD32MR-SV	.71 - .98 (18 - 25) .51 - .79 (13 - 20)	**M32 x 1.5**	1.26 (32)	1.14 (29)	.31 (8)	1.61 (41)
SR-CD40MA-SS SR-CD40MR-SS	SR-CD40MA-SV SR-CD40MR-SV	.87 - 1.26 (22 - 32) .79 - 1.02 (20 - 26)	**M40 x 1.5**	1.57 (40)	1.38 (35)	.31 (8)	1.97 (50)

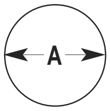
*Note: VDE Approval only applies to Fittings with Metric Thread.

Stainless Steel Strain Relief Fittings can be used in many applications, where the environment dictates a corrosion proof solution.

Typical applications include:

- Off-shore
- Marine
- Chemical Plants
- Food Processing
- Clean Room
- Other Rugged Applications





Suggested Clearance Hole for Non-Threaded Mounting

Also available: 316 INOX Stainless Steel

The 316 material is much harder and ideal for direct exposure to salt water and chemical solutions in marine, off-shore, pharmaceutical, etc.

This special Stainless Steel Strain Relief Fitting is produced upon request only. Please allow for longer delivery times.

Stainless Steel (303), Nickel Plated Brass & Nylon Locking Nuts and Other Accessories available on page 28.

PVDF: Has a Viton® Insert

IMSG

ISO 9001:2000 Certified
CERTIFICATE # 08-511

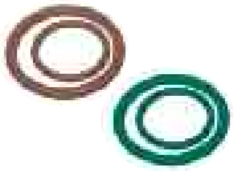
Accessories for Strain Relief Fittings

Summary

Locking Nuts - Section 13-24

Locking Nuts are used when Cord Grips are installed into non-threaded holes.
They are available in these materials:

- Black & Gray Nylon
- Nickel Plated Brass
- EMI/RFI Proof (Nickel Plated Brass)
- Zinc Plated Steel
- Stainless Steel (303) - INOX



O-Rings & Seal Rings - Section 13-25

Provide the external seal between Installation and Strain Relief.
O-Rings are available in: Seal Rings are available in:

- Buna-N
- Viton®
- Polyethylene
- Fiber-Reinforced Plastic
- Silicone

Hole Plugs - Section 13-26 / 13-27

Dome Plugs are designed to fit and seal European PG
per DIN 46320-FS/PA / DIN 46320/Ms & Metric threads.

Dome Plugs available in:
- Black & Gray Nylon
- Nickel Plated Brass

Hex Plugs available in:
- Black Nylon
- Nickel Plated Brass
- Stainless Steel

Blind Plugs availabe in:
- Black Nylon

Adapters - Section 13-28 / 13-29

Adapters will allow you to switch between PG, NPT & Metric threads to fit your application needs.

Black Nylon:
- Metric to PG / PG to Metric Threads
- PG to NPT / NPT to PG Threads

Nickel Plated Brass:
- PG to NPT / Metric to NPT Threads
- NPT to PG / NPT to Metric Threads
- Metric to PG / PG to Metric Threads

Reducers - Section 13-30 / 13-31 / 13-32

Is your thread size off by one size? These Reducers will solve that threading problem.
They convert holes which fit PG, NPT or Metric threads to a Smaller female thread of the same thread type.

Gray Nylon:
- PG to PG Threads
- Metric to Metric Threads

Nickel Plated Brass:
- Metric to Metric Threads
- PG to PG Threads
- NPT to NPT Threads

Black Nylon:
- Metric to Metric Threads

Stainless Steel:
- Metric to Metric Threads
- PG to PG Threads

Enlargers - Section 13-33

Is your thread size off by one size? These Enlargers will solve that threading problem.
They convert holes which fit PG, NPT or Metric threads to a Larger female thread of the same thread type.

Black Nylon:
- Metric to Metric Threads

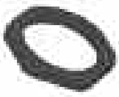
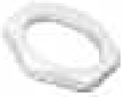
Nickel Plated Brass:
- PG to PG Threads
- Metric to Metric Threads
- NPT to NPT Threads

Accessories for Strain Relief Fittings

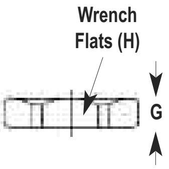
Locking Nuts - PG/NPT/Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Black & Gray Nylon Locking Nuts

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
Black	Grey		G	H
		See page 49 for thread specs	Thickness	Wrench Flats
SR-NP-07-BK	SR-NP-07-GY	**PG 7**	.20 (5)	.75 (19)
SR-NP-09-BK	SR-NP-09-GY	**PG 9**	.20 (5)	.87 (22)
SR-NP-11-BK	SR-NP-11-GY	**PG 11**	.20 (5)	.94 (24)
SR-NP-13-BK	SR-NP-13-GY	**PG 13**	.24 (6)	1.06 (27)
SR-NP-16-BK	SR-NP-16-GY	**PG 16**	.24 (6)	1.18 (30)
SR-NP-21-BK	SR-NP-21-GY	**PG 21**	.28 (7)	1.41 (36)
SR-NP-29-BK	SR-NP-29-GY	**PG 29**	.28 (7)	1.81 (46)
SR-NP-36-BK	SR-NP-36-GY	**PG 36**	.31 (8)	2.36 (60)
SR-NP-42-BK	SR-NP-42-GY	**PG 42**	.31 (8)	2.56 (65)
SR-NP-48-BK	SR-NP-48-GY	**PG 48**	.31 (8)	2.76 (70)
SR-NN-09-BK	SR-NN-09-GY	**3/8” NPT**	.28 (7)	.94 (24)
SR-NN-13-BK	SR-NN-13-GY	**1/2” NPT**	.24 (6)	1.06 (27)
SR-NN-21-BK	SR-NN-21-GY	**3/4” NPT**	.28 (7)	1.26 (32)
SR-NN-29-BK	SR-NN-29-GY	**1” NPT**	.28 (7)	1.57 (40)
SR-NM-12-BK	SR-NM-12-GY	**M12 x 1.5**	.20 (5)	.67 (17)
SR-NM-16-BK	SR-NM-16-GY	**M16 x 1.5**	.20 (5)	.87 (22)
SR-NM-20-BK	SR-NM-20-GY	**M20 x 1.5**	.24 (6)	1.06 (27)
SR-NM-25-BK	SR-NM-25-GY	**M25 x 1.5**	.28 (7)	1.42 (36)
SR-NM-32-BK	SR-NM-32-GY	**M32 x 1.5**	.28 (7)	1.61 (41)
SR-NM-40-BK	SR-NM-40-GY	**M40 x 1.5**	.28 (7)	1.97 (50)
SR-NM-50-BK	SR-NM-50-GY	**M50 x 1.5**	.31 (8)	2.36 (60)
SR-NM-63-BK	SR-NM-63-GY	**M63 x 1.5**	.31 (8)	2.95 (75)

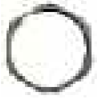
Nylon & Nickel Plated Brass Locknut



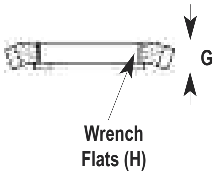
Nickel Plated Brass Locking Nuts

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
Nickel Plated Brass		G	H
	See page 49 for thread specs	Thickness	Wrench Flats
SR-NP-07-BR	**PG 7**	.11 (2.8)	.59 (15)
SR-NP-09-BR	**PG 9**	.11 (2.8)	.71 (18)
SR-NP-11-BR	**PG 11**	.12 (3)	.83 (21)
SR-NP-13-BR	**PG 13**	.12 (3)	.91 (23)
SR-NP-16-BR	**PG 16**	.12 (3)	1.02 (26)
SR-NP-21-BR	**PG 21**	.14 (3.5)	1.26 (32)
SR-NP-29-BR	**PG 29**	.16 (4)	1.61 (41)
SR-NP-36-BR	**PG 36**	.20 (5)	2.01 (51)
SR-NP-42-BR	**PG 42**	.20 (5)	2.36 (60)
SR-NP-48-BR	**PG 48**	.22 (5.5)	2.52 (64)
SR-NN-09-BR	**3/8” NPT**	.14 (3.5)	.75 (19)
SR-NN-13-BR	**1/2” NPT**	.12 (3)	.94 (24)
SR-NN-21-BR	**3/4” NPT**	.14 (3.5)	1.18 (30)
SR-NN-29-BR	**1” NPT**	.14 (3.5)	1.38 (35)
SR-NM-06-BR	**M6 x 1.0**	.10 (2.5)	.39 (10)
SR-NM-08-BR	**M8 x 1.25**	.10 (2.5)	.51 (13)
SR-NM-10-BR	**M10 x 1.5**	.11 (2.8)	.51 (13)
SR-NM-12-BR	**M12 x 1.5**	.11 (2.8)	.59 (15)
SR-NM-16-BR	**M16 x 1.5**	.11 (2.8)	.75 (19)
SR-NM-20-BR	**M20 x 1.5**	.12 (3)	.91 (23)
SR-NM-25-BR	**M25 x 1.5**	.14 (3.5)	1.14 (29)
SR-NM-32-BR	**M32 x 1.5**	.16 (4)	1.42 (36)
SR-NM-40-BR	**M40 x 1.5**	.18 (4.5)	1.77 (45)
SR-NM-50-BR	**M50 x 1.5**	.22 (5.5)	2.17 (55)
SR-NM-63-BR	**M63 x 1.5**	.24 (6)	2.76 (70)

EMI/RFI - Nickel Plated Brass Locking Nuts

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
Nickel Plated Brass w/ Cutting Edges		G	H
	See page 49 for thread specs	Thickness	Wrench Flats
SR-NP-07-BE	**PG 7**	.11 (2.8)	.59 (15)
SR-NP-09-BE	**PG 9**	.11 (2.8)	.71 (18)
SR-NP-11-BE	**PG 11**	.12 (3)	.83 (21)
SR-NP-13-BE	**PG 13**	.12 (3)	.91 (23)
SR-NP-16-BE	**PG 16**	.12 (3)	1.02 (26)
SR-NP-21-BE	**PG 21**	.14 (3.5)	1.26 (32)
SR-NP-29-BE	**PG 29**	.16 (4)	1.61 (41)
SR-NP-36-BE	**PG 36**	.20 (5)	2.01 (51)
SR-NP-42-BE	**PG 42**	.20 (5)	2.36 (60)
SR-NP-48-BE	**PG 48**	.24 (6)	2.52 (64)
SR-NN-13-BE	**1/2” NPT**	.13 (3)	.94 (24)
SR-NM-12-BE	**M12 x 1.5**	.11 (2.8)	.59 (15)
SR-NM-16-BE	**M16 x 1.5**	.11 (2.8)	.75 (19)
SR-NM-20-BE	**M20 x 1.5**	.12 (3)	.94 (24)
SR-NM-25-BE	**M25 x 1.5**	.14 (3.5)	1.18 (30)
SR-NM-32-BE	**M32 x 1.5**	.20 (5)	1.42 (36)
SR-NM-40-BE	**M40 x 1.5**	.20 (5)	1.81 (46)
SR-NM-50-BE	**M50 x 1.5**	.20 (5)	2.36 (60)
SR-NM-63-BE	**M63 x 1.5**	.24 (6)	2.76 (70)

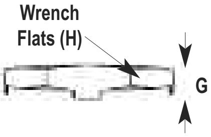
Zinc Plated Steel Locknut



Zinc Plated Steel Locking Nuts

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
		G	H
	See page 49 for thread specs	Thickness	Wrench Flats
NN-10-ST	**1” NPT**	.24 (6)	1.73 (44)
NN-34-ST	**1-1/4” NPT**	.20 (5)	2.01 (53)
NN-36-ST	**1-1/2” NPT**	.16 (4)	2.19 (55.5)

Stainless Steel (303) Locking Nuts in PG & Metric threads are available upon request.



Accessories for Strain Relief Fittings

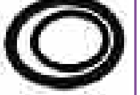
O-Rings & Seal Rings - PG/NPT/Metric Threads

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Seal Rings

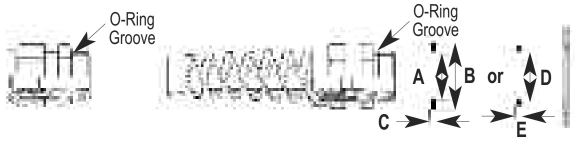
PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Polyethylene	Fiber-reinforced Plastic		A	B	C
		See page 49 for thread specs	Hole O.D.	Height	Outer Diameter
SR-SR-07-NY	SR-SR-07-HD	**PG 7**	.49 (12.5)	.65 (16.5)	.06 (1.5)
SR-SR-09-NY	SR-SR-09-HD	**PG 9**	.60 (15.2)	.75 (19)	.06 (1.5)
SR-SR-11-NY	SR-SR-11-HD	**PG 11**	.73 (18.6)	.89 (22.5)	.06 (1.5)
SR-SR-13-NY	SR-SR-13-HD	**PG 13**	.80 (20.4)	.98 (25)	.06 (1.5)
SR-SR-16-NY	SR-SR-16-HD	**PG 16**	.89 (22.5)	1.06 (27)	.06 (1.5)
SR-SR-21-NY	SR-SR-21-HD	**PG 21**	1.11 (28.3)	1.32 (33.5)	.06 (1.5)
SR-SR-29-NY	SR-SR-29-HD	**PG 29**	1.46 (37)	1.71 (43.5)	.08 (2)
SR-SR-36-NY	SR-SR-36-HD	**PG 36**	1.85 (47)	2.17 (55)	.08 (2)
SR-SR-42-NY	SR-SR-42-HD	**PG 42**	2.13 (54)	2.48 (63)	.08 (2)
SR-SR-48-NY	SR-SR-48-HD	**PG 48**	2.33 (59.3)	2.72 (69)	.08 (2)
SR-SR-11-NY	SR-SR-11-HD	**3/8” NPT**	.73 (18.6)	.89 (22.5)	.06 (1.5)
SR-SR-13-NY	SR-SR-13-HD	**1/2” NPT**	.80 (20.4)	.98 (25)	.06 (1.5)
SR-SR-34-NY	SR-SR-21-HD	**3/4” NPT**	1.06 (27)	1.43 (36)	.06 (1.5)
SR-SM-12-NY	SR-SM-12-HD	**M12 x 1.5**	.47 (12)	.63 (16)	.08 (2)
SR-SM-16-NY	SR-SM-16-HD	**M16 x 1.5**	.63 (16)	.79 (20)	.08 (2)
SR-SM-20-NY	SR-SM-20-HD	**M20 x 1.5**	.79 (20)	.94 (24)	.08 (2)
SR-SM-25-NY	SR-SM-25-HD	**M25 x 1.5**	.98 (25)	1.22 (31)	.08 (2)
SR-SM-32-NY	SR-SM-32-HD	**M32 x 1.5**	1.26 (32)	1.50 (38)	.08 (2)
SR-SM-40-NY	SR-SM-40-HD	**M40 x 1.5**	1.57 (40)	1.96 (48)	.08 (2)
SR-SM-50-NY	SR-SM-50-HD	**M50 x 1.5**	1.97 (50)	2.28 (58)	.08 (2)
SR-SM-63-NY	SR-SM-63-HD	**M63 x 1.5**	2.48 (63)	2.83 (72)	.08 (2)

O-Rings

PART NUMBERS			THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)	
Buna-N	Viton®	Silicone		D	E
			See page 49 for thread specs	Hole O.D.	Height
SR-OR-07-BN	SR-OR-07-VT	SR-OR-07-SI	**PG 7**	.39 (10)	.06 (1.6)
SR-OR-09-BN	SR-OR-09-VT	SR-OR-09-SI	**PG 9**	.47 (12)	.06 (1.6)
SR-OR-11-BN	SR-OR-11-VT	SR-OR-11-SI	**PG 11**	.63 (16)	.06 (1.6)
SR-OR-13-BN	SR-OR-13-VT	SR-OR-13-SI	**PG 13**	.67 (17)	.07 (1.8)
SR-OR-16-BN	SR-OR-16-VT	SR-OR-16-SI	**PG 16**	.71 (18)	.06 (1.6)
SR-OR-21-BN	SR-OR-21-VT	SR-OR-21-SI	**PG 21**	1.02 (26)	.08 (2)
SR-OR-29-BN	SR-OR-29-VT	SR-OR-29-SI	**PG 29**	1.30 (33)	.08 (2)
SR-OR-36-BN	SR-OR-36-VT	SR-OR-36-SI	**PG 36**	1.73 (44)	.08 (2)
SR-OR-42-BN	SR-OR-42-VT	SR-OR-42-SI	**PG 42**	1.97 (50)	.08 (2)
SR-OR-48-BN	SR-OR-48-VT	SR-OR-48-SI	**PG 48**	2.17 (55)	.08 (2)
SR-OR-38-BN	SR-OR-38-VT	SR-OR-38-SI	**3/8” NPT**	.51 (13)	.08 (2)
SR-OR-18-BN	SR-OR-18-VT	SR-OR-18-SI	**1/2” NPT**	.75 (19)	.07 (1.8)
SR-OR-34-BN	SR-OR-34-VT	SR-OR-34-SI	**3/4” NPT**	.87 (22)	.08 (2)
SR-OR-10-BN	SR-OR-10-VT	SR-OR-10-SI	**1” NPT**	1.14 (29)	.08 (2)
SR-OR-54-BN	SR-OR-54-VT	SR-OR-54-SI	**1-1/4” NPT**	1.50 (38)	.10 (2.5)
SR-OR-64-BN	SR-OR-64-VT	SR-OR-64-SI	**1-1/2” NPT**	1.77 (45)	.10 (2.5)
SR-OM-12-BN	SR-OM-12-VT	SR-OM-12-SI	**M12 x 1.5**	.39 (10)	.06 (1.6)
SR-OM-16-BN	SR-OM-16-VT	SR-OM-16-SI	**M16 x 1.5**	.47 (12)	.06 (1.6)
SR-OM-20-BN	SR-OM-20-VT	SR-OM-20-SI	**M20 x 1.5**	.67 (17)	.07 (1.8)
SR-OM-25-BN	SR-OM-25-VT	SR-OM-25-SI	**M25 x 1.5**	.87 (22)	.08 (2)
SR-OM-32-BN	SR-OM-32-VT	SR-OM-32-SI	**M32 x 1.5**	1.14 (29)	.08 (2)
SR-OM-40-BN	SR-OM-40-VT	SR-OM-40-SI	**M40 x 1.5**	1.38 (35)	.08 (2)
SR-OM-50-BN	SR-OM-50-VT	SR-OM-50-SI	**M50 x 1.5**	1.69 (43)	.08 (2)
SR-OM-63-BN	SR-OM-63-VT	SR-OM-63-SI	**M63 x 1.5**	2.17 (55)	.08 (2)

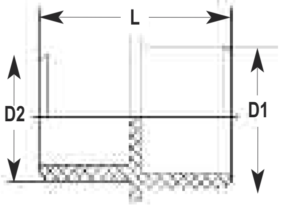
If NEMA 4x or 6 (IP 68 or IP 69K - Submersible) is required, O-Rings or Seal Rings should be used when mounting Strain Relief Fittings to a control panel, secured with a Locking Nut. The straight Strain Relief Fittings feature a molded O-Ring groove. For these fittings the O-Ring is the best solution.

The Snap Elbows and some of the Conduit Fittings don’t have a recess for an O-Ring. In that case, the Seal Ring would be the better choice, unless the hole can be beveled to accommodate an O-Ring.



Blind Plugs - Nylon - Fit PC/NPT/Metric Threads

These non-threaded Plugs are made of Black Nylon (RAL 9005) and fit PG, NPT and Metric Strain Relief Fittings.



Inserts into Dome Nut for a liquid tight seal!

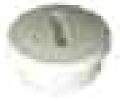
PART NUMBERS	Fits PG Thread	Fits NPT Thread	Fits Metric Thread	DIMENSIONS IN INCHES (mm)		
	See page 49 for thread specs	See page 49 for thread specs		D1 Diameter (1)	D2 Diameter (2)	L Length
SR-PL-07-BK	**PG 7**	-	**M12 x 1.5**	.24 (6)	.18 (4.5)	.59 (15)
SR-PL-09-BK	**PG 9**	**3/8” NPT**	**M16 x 1.5**	.26 (7.5)	.22 (5.5)	.67 (17)
SR-PL-11-BK	**PG 11**	-	**M16 x 1.5**	.37 (9.5)	.26 (6.5)	.75 (19)
SR-PL-13-BK	**PG 13**	**1/2” NPT**	**M20 x 1.5**	.45 (11.5)	.33 (8.5)	.75 (19)
SR-PL-16-BK	**PG 16**	**1/2” NPT**	**M20 x 1.5**	.53 (13.5)	.45 (11.5)	.77 (19.5)
SR-PL-21-BK	**PG 21**	**3/4” NPT**	**M25 x 1.5**	.69 (17.5)	.61 (15.5)	.93 (23.5)
SR-PL-29-BK	**PG 29**	**1” & 1-1/4” NPT**	**M32 x 1.5**	.94 (24)	.75 (19)	1.02 (26)
SR-PL-36-BK	**PG 36**	**1-1/2” NPT**	**M40 x 1.5**	1.22 (31)	.98 (25)	1.10 (28)
SR-PL-42-BK	**PG 42**	-	**M50 x 1.5**	1.46 (37)	1.18 (30)	1.10 (28)
SR-PL-48-BK	**PG 48**	-	**M63 x 1.5**	1.69 (43)	1.34 (34)	1.10 (28)

Accessories for Strain Relief Fittings

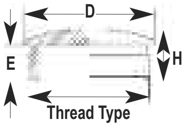
Hole Plugs (Dome & Hex) - PG/NPT/Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Dome Plugs - Nylon

PART NUMBERS		THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black Nylon	Grey Nylon		H	D	E
		See page 49 for thread specs	Overall Height	Dome Diameter	Thread Length
SR-DP-07-BK	SR-DP-07-GY	**PG 7**	.31 (8)	.59 (15)	.20 (5)
SR-DP-09-BK	SR-DP-09-GY	**PG 9**	.35 (9)	.75 (19)	.22 (5.5)
SR-DP-11-BK	SR-DP-11-GY	**PG 11**	.35 (9)	.87 (22)	.24 (6)
SR-DP-13-BK	SR-DP-13-GY	**PG 13**	.37 (9.5)	.98 (25)	.24 (6)
SR-DP-16-BK	SR-DP-16-GY	**PG 16**	.37 (9.5)	1.06 (27)	.24 (6)
SR-DP-21-BK	SR-DP-21-GY	**PG 21**	.43 (11)	1.30 (33)	31 (8)
SR-DP-29-BK	SR-DP-29-GY	**PG 29**	.47 (12)	1.73 (44)	.31 (8)
SR-DP-36-BK	SR-DP-36-GY	**PG 36**	.59 (15)	2.17 (55)	.39 (10)
SR-DP-42-BK	SR-DP-42-GY	**PG 42**	.63 (16)	2.44 (62)	.39 (10)
SR-DP-48-BK	SR-DP-48-GY	**PG 48**	.63 (16)	2.72 (69)	.47 (12)
SR-DM-12-BK	SR-DM-12-GY	**M12 x 1.5**	.39 (10)	.59 (15)	.24 (6)
SR-DM-16-BK	SR-DM-16-GY	**M16 x 1.5**	.45 (11.5)	.79 (20)	.28 (7)
SR-DM-20-BK	SR-DM-20-GY	**M20 x 1.5**	.37 (9.5)	.98 (25)	.24 (6)
SR-DM-25-BK	SR-DM-25-GY	**M25 x 1.5**	.61 (15.5)	1.18 (30)	.43 (11)
SR-DM-32-BK	SR-DM-32-GY	**M32 x 1.5**	.63 (16)	1.50 (38)	.43 (11)
SR-DM-40-BK	SR-DM-40-GY	**M40 x 1.5**	.71 (18)	1.81 (46)	.51 (13)
SR-DM-50-BK	SR-DM-50-GY	**M50 x 1.5**	.73 (18.5)	2.20 (56)	.51 (13)
SR-DM-63-BK	SR-DM-63-GY	**M63 x 1.5**	.75 (19)	2.72 (69)	.59 (15)

Nylon & Nickel Plated Brass Hex Plug



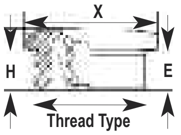
Dome Plugs - Nickel Plated Brass

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Nickel Plated Brass		H	D	E
	See page 49 for thread specs	Overall Height	Dome Diameter	Thread Length
SR-DP-07-BR	**PG 7**	.31 (8)	.55 (14)	.20 (5)
SR-DP-09-BR	**PG 9**	.35 (9)	.67 (17)	.24 (6)
SR-DP-11-BR	**PG 11**	.35 (9)	.79 (20)	.24 (6)
SR-DP-13-BR	**PG 13**	.37 (9.5)	.87 (22)	.26 (6.5)
SR-DP-16-BR	**PG 16**	.37 (9.5)	.94 (24)	.26 (6.5)
SR-DP-21-BR	**PG 21**	.43 (11)	1.18 (30)	.28 (7)
SR-DP-29-BR	**PG 29**	.47 (12)	1.54 (39)	.31 (8)
SR-DP-36-BR	**PG 36**	.59 (15)	1.97 (50)	.35 (9)
SR-DP-42-BR	**PG 42**	.63 (16)	2.24 (57)	.39 (10)
SR-DP-48-BR	**PG 48**	.63 (16)	2.52 (64)	.39 (10)
SR-DM-12-BR	**M12 x 1.5**	.39 (10)	.55 (14)	.37 (9.5)
SR-DM-16-BR	**M16 x 1.5**	.45 (11.5)	.71 (18)	.20 (5)
SR-DM-20-BR	**M20 x 1.5**	.37 (9.5)	.87 (22)	.26 (6.5)
SR-DM-25-BR	**M25 x 1.5**	.61 (15.5)	1.10 (28)	.28 (7)
SR-DM-32-BR	**M32 x 1.5**	.63 (16)	1.38 (35)	.31 (8)
SR-DM-40-BR	**M40 x 1.5**	.71 (18)	1.73 (44)	.33 (8.5)
SR-DM-50-BR	**M50 x 1.5**	.73 (18.5)	2.13 (54)	.35 (9)
SR-DM-63-BR	**M63 x 1.5**	.75 (19)	2.64 (67)	.39 (10)

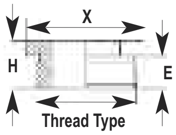
Hex Plugs - Nylon

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Black Nylon		H	X	E
	See page 49 for thread specs	Overall Height	Wrench Flat	Thread Length
SR-HP-07-BK	**PG 7 / 1/4”NPT**	.51 (13)	.59 (15)	.33 (8.5)
SR-HP-09-BK	**PG 9**	.51 (13)	.75 (19)	.33 (8.5)
SR-HP-11-BK	**PG 11**	.57 (14.5)	.94 (24)	.35 (9)
SR-HP-13-BK	**PG 13**	.57 (14.5)	.94 (24)	.35 (9)
SR-HP-16-BK	**PG 16**	.63 (16)	1.10 (28)	.41 (10.5)
SR-HP-21-BK	**PG 21**	.69 (17.5)	1.42 (36)	.45 (11.5)
SR-HP-29-BK	**PG 29**	.71 (18)	1.81 (46)	.45 (11.5)
SR-HP-36-BK	**PG 36**	.79 (20)	2.17 (55)	.53 (13.5)
SR-HP-42-BK	**PG 42**	.79 (20)	2.36 (60)	.53 (13.5)
SR-HP-48-BK	**PG 48**	.83 (21)	2.76 (70)	.57 (14.5)
SR-HN-38-BK	**3/8” NPT**	.83 (21)	.75 (19)	.59 (15)
SR-HN-12-BK	**1/2” NPT**	.81 (20.5)	.94 (24)	.55 (14)
SR-HN-34-BK	**3/4” NPT**	.87 (22)	1.10 (28)	.63 (16)
SR-HN-10-BK	**1” NPT**	.91 (23)	1.34 (34)	.67 (17)
SR-HM-12-BK	**M12 x 1.5**	.51 (13)	.59 (15)	.33 (8.5)
SR-HM-16-BK	**M16 x 1.5**	.51 (13)	.75 (19)	.33 (8.5)
SR-HM-20-BK	**M20 x 1.5**	.57 (14.5)	.94 (24)	.35 (9)
SR-HM-25-BK	**M25 x 1.5**	.63 (16)	1.10 (28)	.41 (10.5)
SR-HM-32-BK	**M32 x 1.5**	.69 (17.5)	1.42 (36)	.45 (11.5)
SR-HM-40-BK	**M40 x 1.5**	.71 (18)	1.81 (46)	.45 (11.5)
SR-HM-50-BK	**M50 x 1.5**	.79 (20)	2.17 (55)	.53 (13.5)
SR-HM-63-BK	**M63 x 1.5**	.83 (21)	2.76 (70)	.57 (14.5)

Nylon Hex Plug



Note: HP & HM Plugs can be tightened with Hex & Allen wrenches, as well as regular screwdrivers.



Hex Plugs - Nickel Plated Brass

PART NUMBERS	THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
Nickel Plated Brass		H	X	E
	See page 49 for thread specs	Overall Height	Wrench Flat	Thread Length
SR-HP-07-BR	**PG 7 / 1/4”NPT**	.31 (8)	.55 (14)	.20 (5)
SR-HP-09-BR	**PG 9**	.35 (9)	.67 (17)	.24 (6)
SR-HP-11-BR	**PG 11**	.37 (9.5)	.79 (20)	.24 (6)
SR-HP-13-BR	**PG 13**	.39 (10)	.87 (22)	.26 (6.5)
SR-HP-16-BR	**PG 16**	.39 (10)	.94 (24)	.26 (6.5)
SR-HP-21-BR	**PG 21**	.41 (10.5)	1.18 (30)	.28 (7)
SR-HP-29-BR	**PG 29**	.49 (12.5)	1.61 (41)	.31 (8)
SR-HP-36-BR	**PG 36**	.51 (13)	1.97 (50)	.31 (8)
SR-HP-42-BR	**PG 42**	.59 (15)	2.28 (58)	.35 (9)
SR-HP-48-BR	**PG 48**	.65 (16.5)	2.56 (65)	.39 (10)
SR-HM-12-BR	**M12 x 1.5**	.37 (9.5)	.55 (14)	.26 (6.5)
SR-HM-16-BR	**M16 x 1.5**	.35 (9)	.75 (19)	.24 (6)
SR-HM-20-BR	**M20 x 1.5**	.37 (9.5)	.87 (22)	.24 (6)
SR-HM-25-BR	**M25 x 1.5**	.41 (10.5)	1.18 (30)	.28 (7)
SR-HM-32-BR	**M32 x 1.5**	.49 (12.5)	1.61 (41)	.31 (8)
SR-HM-40-BR	**M40 x 1.5**	.51 (13)	1.81 (46)	.31 (8)
SR-HM-50-BR	**M50 x 1.5**	.59 (15)	2.17 (55)	.35 (9)
SR-HM-63-BR	**M63 x 1.5**	.65 (16.5)	2.76 (70)	.39 (10)

Nickel Plated Brass Hex Plug

For all Hole Plugs listed, the O-Ring is optional (see page 30)
To order plug with O-Ring, add “-B” (Buna-N) or “-V” (Viton®) to part number (e.g. DP-11-BR-B, HP-11-BR-V)

Accessories for Strain Relief Fittings

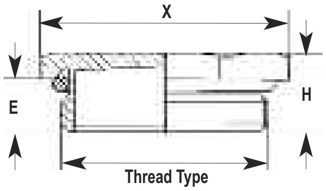
Hex Plugs - Stainless Steel - PG/NPT/Metric Threads

ISO 9001:2000 Certified
CERTIFICATE # 08-511

These Plugs are designed to fit and seal European PG per DIN 46320-FS/PA and DIN 46320/Ms and Metric threads.

They are made of Stainless Steel and are available with Buna-N, Viton® or Silicone O-Ring.

Also available in Nylon or Nickel Plated Brass. (See page 31)

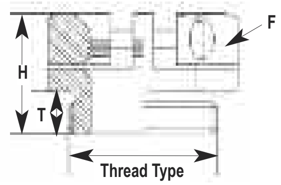


PART NUMBERS			THREAD TYPE & SIZE	DIMENSIONS IN INCHES (mm)		
w/ Buna-N O-Ring	w/ Viton® O-Ring	w/ Silicone O-Ring	See page 49 for thread specs	H Overall Height	X Wrench Flat	E Thread Length
SR-HP-07-SS-B	SR-HP-07-SS-V	SR-HP-07-SS-S	**PG 7 / 1/4"NPT**	.31 (8)	.55 (14)	.20 (5)
SR-HP-09-SS-B	SR-HP-09-SS-V	SR-HP-09-SS-S	**PG 9**	.35 (9)	.67 (17)	.24 (6)
SR-HP-11-SS-B	SR-HP-11-SS-V	SR-HP-11-SS-S	**PG 11**	.37 (9.5)	.79 (20)	.24 (6)
SR-HP-13-SS-B	SR-HP-13-SS-V	SR-HP-13-SS-S	**PG 13**	.39 (10)	.87 (22)	.26 (6.5)
SR-HP-16-SS-B	SR-HP-16-SS-V	SR-HP-16-SS-S	**PG 16**	.39 (10)	.94 (24)	.26 (6.5)
SR-HP-21-SS-B	SR-HP-21-SS-V	SR-HP-21-SS-S	**PG 21**	.41 (10.5)	1.18 (30)	.28 (7)
SR-HP-29-SS-B	SR-HP-29-SS-V	SR-HP-29-SS-S	**PG 29**	.49 (12.5)	1.61 (41)	.31 (8)
SR-HP-36-SS-B	SR-HP-36-SS-V	SR-HP-36-SS-S	**PG 36**	.51 (13)	1.97 (50)	.31 (8)
SR-HP-42-SS-B	SR-HP-42-SS-V	SR-HP-42-SS-S	**PG 42**	.59 (15)	2.28 (58)	.35 (9)
SR-HP-48-SS-B	SR-HP-48-SS-V		**PG 48**	.65 (16.5)	2.56 (65)	.39 (10)
SR-HM-12-SS-B	SR-HM-12-SS-V	SR-HM-12-SS-S	**M12 x 1.5**	.37 (9.5)	.55 (14)	.26 (6.5)
SR-HM-16-SS-B	SR-HM-16-SS-V	SR-HM-16-SS-S	**M16 x 1.5**	.35 (9)	.75 (19)	.24 (6)
SR-HM-20-SS-B	SR-HM-20-SS-V	SR-HM-20-SS-S	**M20 x 1.5**	.37 (9.5)	.87 (22)	.24 (6)
SR-HM-25-SS-B	SR-HM-25-SS-V	SR-HM-25-SS-S	**M25 x 1.5**	.41 (10.5)	1.18 (30)	.28 (7)
SR-HM-32-SS-B	SR-HM-32-SS-V	SR-HM-32-SS-S	**M32 x 1.5**	.49 (12.5)	1.61 (41)	.31 (8)
SR-HM-40-SS-B	SR-HM-40-SS-V	SR-HM-40-SS-S	**M40 x 1.5**	.51 (13)	1.81 (46)	.31 (8)
SR-HM-50-SS-B	SR-HM-50-SS-V	SR-HM-50-SS-S	**M50 x 1.5**	.59 (15)	2.17 (55)	.35 (9)
SR-HM-63-SS-B	SR-HM-63-SS-V	SR-HM-63-SS-S	**M63 x 1.5**	.83 (21)	2.76 (70)	.39 (10)

Clamp - fit PG/NPT & Male Metric Threads

This clamp offers extra pull-out resistance.

Made of durable Nickel Plated Brass, it offers an excellent solution for your specific application needs.



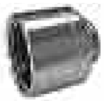
PART NUMBERS	CABLE RANGE	THREAD TYPE & SIZE (Male)	DIMENSIONS IN INCHES (mm)			
Nickel Plated Brass			A Hole O.D.	H Body Length	T Thread Length	F Wrench Flat
SR-KL07AA-BR	.22 - .31 (5.5 - 8)	**PG 7**	.49 (12.5)	.58 (14.8)	.22 (5.5)	.63 (16)
SR-KL09AA-BR	.26 - .39 (6.5 - 10)	**PG 9**	.60 (15.2)	.65 (16.6)	.24 (6)	.75 (19)
SR-KL11AA-BR	.30 - .47 (7.5 - 12)	**PG 11**	.73 (18.5)	.68 (17.3)	.24 (6)	.87 (22)
SR-KL13AA-BR	.33 - .55 (8.5 - 14)	**PG 13**	.80 (20.3)	.70 (17.8)	.26 (6.5)	.94 (24)
SR-KL16AA-BR	.37 - .63 (9.5 - 16)	**PG 16**	.88 (22.3)	.72 (18.3)	.26 (6.5)	1.02 (26)
SR-KL21AA-BR	.47 - .83 (12 - 21)	**PG 21**	1.12 (28.4)	.82 (20.8)	.30 (7.5)	1.30 (33)
SR-KL29AA-BR	.75 - 1.18 (19 - 30)	**PG 29**	1.47 (37.3)	.86 (21.8)	.31 (8)	1.65 (42)
SR-KL36AA-BR	.98 - 1.46 (25 - 37)	**PG 36**	1.85 (47)	1.00 (25.3)	.37 (9.5)	2.05 (52)
SR-KL42AA-BR	1.22 - 1.69 (31 - 43)	**PG 42**	2.13 (54.1)	1.04 (26.3)	.39 (10)	2.32 (59)
SR-KL48AA-BR	1.38 - 1.89 (35 - 48)	**PG 48**	2.34 (59.4)	1.07 (27.3)	.43 (11)	2.32 (59)
SR-KL12MA-BR	.20 - .30 (5-7.5)	**M12 x 1.5**	.47 (12)	.59 (15)	.22 (5.5)	.63 (16)
SR-KL16MA-BR	.28 - .39 (7-10)	**M16 x 1.5**	.63 (16)	.63 (16)	.24 (6)	.75 (19)
SR-KL20MA-BR	.39 - .55 (10-14)	**M20 x 1.5**	.79 (20)	.71 (18)	.26 (6.5)	.94 (24)
SR-KL25MA-BR	.47 - .85 (12-21.5)	**M25 x 1.5**	.98 (25)	.83 (21)	.31 (8)	1.34 (34)
SR-KL32MA-BR	.63 - 1.06 (16-27)	**M32 x 1.5**	1.26 (32)	.87 (22)	.31 (8)	1.65 (42)
SR-KL40MA-BR	.87 - 1.30 (22-33)	**M40 x 1.5**	1.57 (40)	1.00 (25.5)	.37 (9.5)	2.05 (52)
SR-KL50MA-BR	.98 - 1.52 (25-38.5)	**M50 x 1.5**	1.97 (50)	1.00 (25.5)	.37 (9.5)	2.05 (52)

Adapters, Reducers & Enlargers

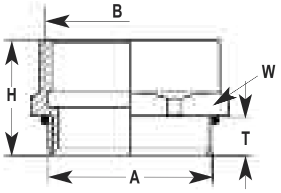
Adapters - Nickel Plated Brass

ISO 9001:2000 Certified
CERTIFICATE # 08-511

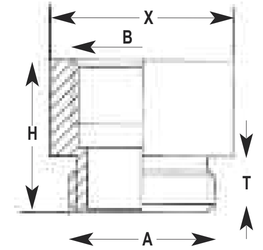
Adapters - PG to NPT Threads

PART NUMBERS		THREADS		DIMENSIONS IN INCHES (mm)		
Nickel Plated Brass w/ Buna-N O-Ring	Aluminum 	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
SR-AG-0912-BR	SR-AG-0912-AL	**PG 9**	**1/2" NPT**	.94 (24)	.24 (6)	.94 (24)
SR-AG-1112-BR	-	**PG 11**	**1/2" NPT**	.94 (24)	.24 (6)	.89 (22.7)
SR-AG-1312-BR	-	**PG 13**	**1/2" NPT**	.94 (24)	.26 (6.5)	.93 (23.5)
SR-AG-1612-BR	-	**PG 16**	**1/2" NPT**	.94 (24)	.26 (6.5)	.91 (23)
SR-AG-2112-BR	-	**PG 21**	**1/2" NPT**	1.18 (30)	.28 (7)	.59 (15)
SR-AG-2134-BR	-	**PG 21**	**3/4" NPT**	1.18 (30)	.28 (7)	.94 (24)
SR-AG-2910-BR	-	**PG 29**	**1" NPT**	1.57 (40)	.31 (8)	.79 (20)

Dealing with foreign products?
Is connecting a challenge?
Well, look no further!



(AG-xxxx-BR & AM-xxxx-BR)



(AF-xxxx-BR, AP-xxxx-BR & AG-xxxx-AL)

Adapters - PG to Metric Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**X** Outer Diameter	**T** Thread Length	**H** Height
SR-AP-0916-BR	**PG 9**	**M16 x 1.5**	.79 (20)	.24 (6)	.65 (16.5)
SR-AP-1120-BR	**PG 11**	**M20 x 1.5**	.87 (22)	.26 (6.5)	.75 (19)
SR-AP-1320-BR	**PG 13**	**M20 x 1.5**	.87 (22)	.26 (6.5)	.75 (19)
SR-AP-1625-BR	**PG 16**	**M25 x 1.5**	1.06 (27)	.26 (6.5)	.83 (21)

Adapters - Metric to PG Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**X** Outer Diameter	**T** Thread Length	**H** Height
SR-AF-1609-BR	**M16 x 1.5**	**PG 9**	.79 (20)	.24 (6)	.65 (16.5)
SR-AF-2011-BR	**M20 x 1.5**	**PG 11**	.87 (22)	.26 (6.5)	.75 (19)
SR-AF-2013-BR	**M20 x 1.5**	**PG 13**	.87 (22)	.26 (6.5)	.75 (19)
SR-AF-2016-BR	**M20 x 1.5**	**PG 16**	.84 (24)	.26 (6.5)	.75 (19)
SR-AF-2516-BR	**M25 x 1.5**	**PG 16**	1.10 (28)	.26 (6.5)	.75 (19)
SR-AF-2521-BR	**M25 x 1.5**	**PG 21**	1.18 (30)	.26 (6.5)	.83 (21)
SR-AF-3229-BR	**M32 x 1.5**	**PG 29**	1.54 (39)	.28 (7)	.91 (23)

Adapters - Metric to NPT Threads

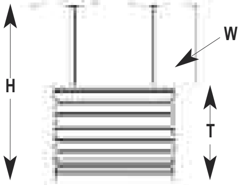
PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
SR-AM-1612-BR	**M16 x 1.5**	**1/2" NPT**	.94 (24)	.24 (6)	.91 (23)
SR-AM-2012-BR	**M20 x 1.5**	**1/2" NPT**	.94 (24)	.24 (6)	.91 (23)
SR-AM-2512-BR	**M25 x 1.5**	**1/2" NPT**	1.18 (30)	.28 (7)	.59 (15)
SR-AM-2534-BR	**M25 x 1.5**	**3/4" NPT**	1.18 (30)	.28 (7)	1.07 (26)
SR-AM-3210-BR	**M32 x 1.5**	**1" NPT**	1.57 (40)	.31 (8)	1.30 (33)
SR-AM-3254-BR	**M32 x 1.5**	**1-1/4" NPT**	1.81 (46)	.31 (8)	1.30 (33)

Adapters - NPT to PG Threads

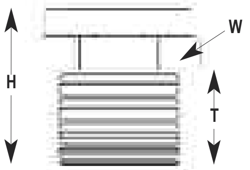
PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
SR-AN-1407-BR	**1/4" NPT**	**PG 7**	.75 (19)	.59 (15)	.98 (25)
SR-AN-1209-BR	**1/2" NPT**	**PG 9**	.98 (25)	.79 (20)	1.18 (30)
SR-AN-1211-BR	**1/2" NPT**	**PG 11**	.98 (25)	.79 (20)	1.18 (30)
SR-AN-1213-BR	**1/2" NPT**	**PG 13**	.98 (25)	.79 (20)	1.18 (30)
SR-AN-1221-BR	**1/2" NPT**	**PG 21**	1.30 (33)	.79 (20)	1.26 (32)
SR-AN-3421-BR	**3/4" NPT**	**PG 21**	1.30 (33)	.67 (17)	1.22 (31)
SR-AN-1029-BR	**1" NPT**	**PG 29**	1.61 (41)	.98 (25)	1.38 (35)
SR-AN-5429-BR	**1-1/4" NPT**	**PG 29**	1.69 (43)	.94 (24)	1.34 (34)

Adapters - NPT to Metric Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
SR-AT-1216-BR	**1/2" NPT**	**M16 x 1.5**	.98 (25)	.79 (20)	1.18 (30)
SR-AT-1220-BR	**1/2" NPT**	**M20 x 1.5**	.98 (25)	.79 (20)	1.18 (30)
SR-AT-1225-BR	**1/2" NPT**	**M25 x 1.5**	1.26 (32)	.79 (20)	1.18 (30)
SR-AT-3425-BR	**3/4" NPT**	**M25 x 1.5**	1.24 (31.6)	.75 (19)	1.18 (30)
SR-AT-1032-BR	**1" NPT**	**M32 x 1.5**	1.50 (38)	.98 (25)	1.61 (41)
SR-AT-5432-BR	**1-1/4" NPT**	**M32 x 1.5**	1.67 (42.5)	.59 (15)	1.30 (33)



(AN-xxxx-BR)



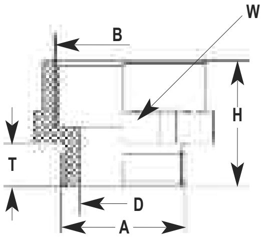
(AT-xxxx-BR)

Adapters, Reducers & Enlargers

Adapters - Black Nylon

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Type A



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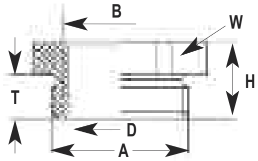
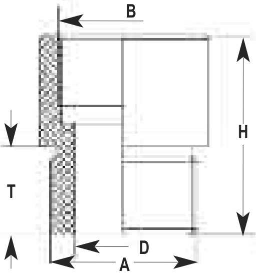
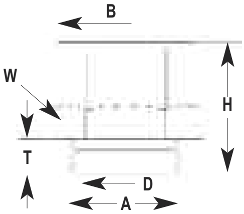


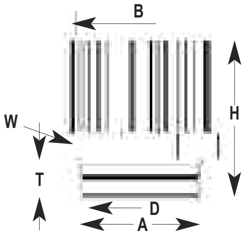
Type C



Type D



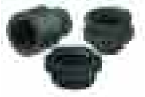
Type E



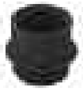
Adapters - Metric to PG Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Inner Diameter	W Wrench Flat
SR-AF-1207-BK	**M12 x 1.5**	**PG 7**	**A**	.31 (8)	.79 (20)	.26 (6.5)	.67 (17)
SR-AF-1609-BK	**M16 x 1.5**	**PG 9**	**C**	.59 (15)	1.34 (34)	.33 (8.5)	N/A
SR-AF-2013-BK	**M20 x 1.5**	**PG 13**	**A**	.31 (8)	.83 (21)	.55 (14)	.98 (25)
SR-AF-2513-BK	**M25 x 1.5**	**PG13**	**B**	.31 (8)	.55 (14)	.71 (18)	1.14 (29)
SR-AF-2516-BK	**M25 x 1.5**	**PG 16**	**A**	.31 (8)	.87 (22)	.71 (18)	1.14 (29)
SR-AF-3221-BK	**M32 x 1.5**	**PG 21**	**A**	.39 (10)	.98 (25)	.98 (25)	1.43 (36)
SR-AF-4029-BK	**M40 x 1.5**	**PG 29**	**A**	.39 (10)	.98 (25)	1.30 (33)	1.77 (45)
SR-AF-5036-BK	**M50 x 1.5**	**PG 36**	**A**	.47 (12)	1.14 (29)	1.69 (43)	2.17 (55)
SR-AF-6342-BK	**M63 x 1.5**	**PG 42**	**C**	.59 (15)	.79 (20)	2.05 (52)	N/A
SR-AF-6348-BK	**M63 x 1.5**	**PG 48**	**C**	.59 (15)	1.38 (35)	2.01 (51)	N/A

Adapters - PG to Metric Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Inner Diameter	W Wrench Flat
SR-AP-0712-BK	**PG 7**	**M12 x 1.5**	**C**	.59 (15)	1.34 (34)	.24 (6)	N/A
SR-AP-0912-BK	**PG 9**	**M12 x 1.5**	**C**	.59 (15)	1.34 (34)	.33 (8.5)	N/A
SR-AP-0916-BK	**PG 9**	**M16 x 1.5**	**A**	.31 (8)	.79 (20)	.35 (9)	.83 (21)
SR-AP-1116-BK	**PG 11**	**M16 x 1.5**	**C**	.59 (15)	1.34 (34)	.45 (11.5)	N/A
SR-AP-1120-BK	**PG 11**	**M20 x 1.5**	**C**	.59 (15)	1.34 (34)	.45 (11.5)	N/A
SR-AP-1316-BK	**PG 13**	**M16 x 1.5**	**B**	.31 (8)	.55 (14)	.55 (14)	.98 (25)
SR-AP-1320-BK	**PG 13**	**M20 x 1.5**	**A**	.31 (8)	.83 (21)	.55 (14)	.98 (25)
SR-AP-1620-BK	**PG 16**	**M20 x 1.5**	**A**	.31 (8)	.83 (21)	.63 (16)	1.06 (27)
SR-AP-1625-BK	**PG 16**	**M25 x 1.5**	**A**	.31 (8)	.91 (23)	.63 (16)	1.18 (30)
SR-AP-2125-BK	**PG 21**	**M25 x 1.5**	**C**	.59 (15)	1.34 (34)	.81 (20.5)	N/A
SR-AP-2132-BK	**PG 21**	**M32 x 1.5**	**A**	.31 (8)	.91 (23)	.83 (21)	1.46 (37)
SR-AP-2932-BK	**PG 29**	**M32 x 1.5**	**C**	.59 (15)	1.34 (34)	1.10 (28)	N/A
SR-AP-2940-BK	**PG 29**	**M40 x 1.5**	**A**	.39 (10)	1.06 (27)	1.18 (30)	1.77 (45)
SR-AP-3640-BK	**PG 36**	**M40 x 1.5**	**C**	.59 (15)	.79 (20)	1.50 (38)	N/A
SR-AP-3650-BK	**PG 36**	**M50 x 1.5**	**C**	.59 (15)	1.36 (34.5)	1.46 (37)	N/A
SR-AP-4240-BK	**PG 42**	**M40 x 1.5**	**C**	.59 (15)	.79 (20)	1.50 (38)	N/A
SR-AP-4250-BK	**PG 42**	**M50 x 1.5**	**C**	.59 (15)	1.36 (34.5)	1.69 (43)	N/A
SR-AP-4850-BK	**PG 48**	**M50 x 1.5**	**C**	.59 (15)	.79 (20)	1.50 (38)	N/A
SR-AP-4863-BK	**PG 48**	**M63 x 1.5**	**C**	.59 (15)	1.38 (35)	1.89 (48)	N/A

Adapters - PG to NPT Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Inner Diameter	W Wrench Flat
SR-AG-1112-BK	**PG 13**	**1/2" NPT**	**D**	.28 (7)	.83 (21)	N/A	.94 (24)
SR-AG-1312-BK	**PG 11**	**1/2" NPT**	**D**	.35 (9)	.91 (23)	N/A	.94 (24)

Adapters - Metric to NPT Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Inner Diameter	W Wrench Flat
SR-AM-1612-BK	**M16 x 1.5**	**1/2" NPT**	**E**	.28 (7)	1.10 (28)	N/A	1.02 (26)
SR-AM-2012-BK	**M20 x 1.5**	**1/2" NPT**	**E**	.28 (7)	1.06 (27)	N/A	1.02 (26)

Adapters, Reducers & Enlargers

Reducers (Hex & Round) - Nickel Plated Brass

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Is your thread size off by one size?

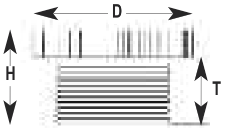
These Reducers will solve that threading problem. They convert holes which fit PG, NPT or Metric threads to a smaller female thread of the same thread type.

Reducers - Metric to Metric Threads

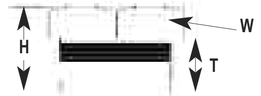
PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**D** Outer Diameter	**T** Thread Length	**H** Height
SR-RR-1612-BR	**M16 x 1.5**	**M12 x 1.5**	.71 (18)	.24 (6)	.33 (8.5)
SR-RR-2012-BR	**M20 x 1.5**	**M12 x 1.5**	.94 (24)	.26 (6.5)	.35 (9)
SR-RR-2016-BR	**M20 x 1.5**	**M16 x 1.5**	.94 (24)	.26 (6.5)	.35 (9)
SR-RR-2516-BR	**M25 x 1.5**	**M16 x 1.5**	1.18 (30)	.28 (7)	.39 (10)
SR-RR-2520-BR	**M25 x 1.5**	**M20 x 1.5**	1.18 (30)	.28 (7)	.39 (10)
SR-RR-3220-BR	**M32 x 1.5**	**M20 x 1.5**	1.54 (39)	.31 (8)	.45 (11.5)
SR-RR-3225-BR	**M32 x 1.5**	**M25 x 1.5**	1.54 (39)	.31 (8)	.45 (11.5)
SR-RR-4025-BR	**M40 x 1.5**	**M25 x 1.5**	1.69 (43)	.31 (8)	.45 (11.5)
SR-RR-4032-BR	**M40 x 1.5**	**M32 x 1.5**	1.69 (43)	.35 (9)	.49 (12.5)
SR-RR-5032-BR	**M50 x 1.5**	**M32 x 1.5**	2.24 (57)	.39 (10)	.55 (14)
SR-RR-5040-BR	**M50 x 1.5**	**M40 x 1.5**	2.24 (57)	.39 (10)	.55 (14)
SR-RR-6340-BR	**M63 x 1.5**	**M40 x 1.5**	2.52 (64)	.39 (10)	.55 (14)
SR-RR-6350-BR	**M63 x 1.5**	**M50 x 1.5**	2.52 (64)	.39 (10)	.55 (14)

Reducers - PG to PG Threads

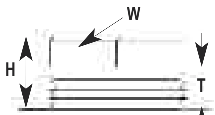
PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**D** Outer Diameter	**T** Thread Length	**H** Height
SR-RR-0907-BR	**PG 9**	**PG 7**	.67 (17)	.24 (6)	.33 (8.5)
SR-RR-1107-BR	**PG 11**	**PG 7**	.79 (20)	.24 (6)	.33 (8.5)
SR-RR-1109-BR	**PG 11**	**PG 9**	.79 (20)	.24 (6)	.33 (8.5)
SR-RR-1309-BR	**PG 13**	**PG 9**	.87 (22)	.26 (6.5)	.35 (9)
SR-RR-1311-BR	**PG 13**	**PG 11**	.87 (22)	.26 (6.5)	.35 (9)
SR-RR-1609-BR	**PG 16**	**PG 9**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RR-1611-BR	**PG 16**	**PG 11**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RR-1613-BR	**PG 16**	**PG 13**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RR-2111-BR	**PG 21**	**PG 11**	1.18 (30)	.28 (7)	.39 (10)
SR-RR-2113-BR	**PG 21**	**PG 13**	1.18 (30)	.28 (7)	.39 (10)
SR-RR-2116-BR	**PG 21**	**PG 16**	1.18 (30)	.28 (7)	.39 (10)
SR-RR-2916-BR	**PG 29**	**PG 16**	1.54 (39)	.31 (8)	.45 (11.5)
SR-RR-2921-BR	**PG 29**	**PG 21**	1.54 (39)	.31 (8)	.45 (11.5)
SR-RR-3621-BR	**PG 36**	**PG 21**	1.97 (50)	.35 (9)	.49 (12.5)
SR-RR-3629-BR	**PG 36**	**PG 29**	1.97 (50)	.35 (9)	.49 (12.5)
SR-RR-4229-BR	**PG 42**	**PG 29**	2.24 (57)	.39 (10)	.55 (14)
SR-RR-4236-BR	**PG 42**	**PG 36**	2.24 (57)	.39 (10)	.55 (14)
SR-RR-4836-BR	**PG 48**	**PG 36**	2.52 (64)	.39 (10)	.55 (14)
SR-RR-4842-BR	**PG 48**	**PG 42**	2.52 (64)	.39 (10)	.55 (14)



(RR-xxxx-BR)

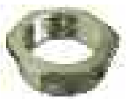
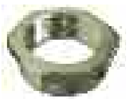


(RQ-xxxx-BR, RP-xxxx-BR & RM-xxxx-BR)

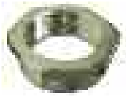


(RN-xxxx-BR)

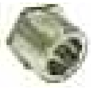
Reducers - PG to PG Threads

PART NUMBERS		THREADS		DIMENSIONS IN INCHES (mm)		
w/ Buna-N O-Ring	without O-Ring	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
						
SR-RQ-0907-BR	SR-RP-0907-BR	**PG 9**	**PG 7**	.67 (17)	.24 (6)	.34 (8.8)
SR-RQ-1107-BR	SR-RP-1107-BR	**PG 11**	**PG 7**	.79 (20)	.24 (6)	.35 (9)
SR-RQ-1109-BR	SR-RP-1109-BR	**PG 11**	**PG 9**	.79 (20)	.24 (6)	.35 (9)
SR-RQ-1309-BR	SR-RP-1309-BR	**PG 13**	**PG 9**	.87 (22)	.26 (6.5)	.37 (9.5)
SR-RQ-1311-BR	SR-RP-1311-BR	**PG 13**	**PG 11**	.87 (22)	.26 (6.5)	.37 (9.5)
SR-RQ-1609-BR	SR-RP-1609-BR	**PG 16**	**PG 9**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RQ-1611-BR	SR-RP-1611-BR	**PG 16**	**PG 11**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RQ-1613-BR	SR-RP-1613-BR	**PG 16**	**PG 13**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RQ-2111-BR	SR-RP-2111-BR	**PG 21**	**PG 11**	1.18 (30)	.28 (7)	.41 (10.3)
SR-RQ-2113-BR	SR-RP-2113-BR	**PG 21**	**PG 13**	1.18 (30)	.28 (7)	.41 (10.3)
SR-RQ-2116-BR	SR-RP-2116-BR	**PG 21**	**PG 16**	1.18 (30)	.28 (7)	.41 (10.3)
SR-RQ-2916-BR	SR-RP-2916-BR	**PG 29**	**PG 16**	1.57 (40)	.31 (8)	.45 (11.5)
SR-RQ-2921-BR	SR-RP-2921-BR	**PG 29**	**PG 21**	1.57 (40)	.31 (8)	.45 (11.5)
SR-RQ-3621-BR	SR-RP-3621-BR	**PG 36**	**PG 21**	1.97 (50)	.35 (9)	.49 (12.5)
SR-RQ-3629-BR	SR-RP-3629-BR	**PG 36**	**PG 29**	1.97 (50)	.35 (9)	.49 (12.5)
SR-RQ-4229-BR	SR-RP-4229-BR	**PG 42**	**PG 29**	2.24 (57)	.39 (10)	.53 (13.5)
SR-RQ-4236-BR	SR-RP-4236-BR	**PG 42**	**PG 36**	2.24 (57)	.39 (10)	.53 (13.5)
SR-RQ-4836-BR	SR-RP-4836-BR	**PG 48**	**PG 36**	2.52 (64)	.39 (10)	.53 (13.5)
SR-RQ-4842-BR	SR-RP-4842-BR	**PG 48**	**PG 42**	2.52 (64)	.39 (10)	.53 (13.5)

Reducers - Metric to Metric Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
w/ Buna-N O-Ring 	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
SR-RM-1612-BR	**M16 x 1.5**	**M12 x 1.5**	.67 (17)	.20 (5)	.31 (8)
SR-RM-2012-BR	**M20 x 1.5**	**M12 x 1.5**	.87 (22)	.24 (6)	.35 (9)
SR-RM-2016-BR	**M20 x 1.5**	**M16 x 1.5**	.87 (22)	.24 (6)	.35 (9)
SR-RM-2516-BR	**M25 x 1.5**	**M16 x 1.5**	1.06 (27)	.28 (7)	.39 (10)
SR-RM-2520-BR	**M25 x 1.5**	**M20 x 1.5**	1.06 (27)	.28 (7)	.39 (10)
SR-RM-3216-BR	**M32 x 1.5**	**M16 x 1.5**	1.34 (34)	.31 (8)	.34 (11)
SR-RM-3220-BR	**M32 x 1.5**	**M20 x 1.5**	1.34 (34)	.31 (8)	.43 (11)
SR-RM-3225-BR	**M32 x 1.5**	**M25 x 1.5**	1.34 (34)	.31 (8)	.43 (11)
SR-RM-4020-BR	**M40 x 1.5**	**M20 x 1.5**	1.46 (43)	.31 (8)	.47 (12)
SR-RM-4025-BR	**M40 x 1.5**	**M25 x 1.5**	1.46 (43)	.31 (8)	.47 (12)
SR-RM-4032-BR	**M40 x 1.5**	**M32 x 1.5**	1.46 (43)	.31 (8)	.47 (12)
SR-RM-5025-BR	**M50 x 1.5**	**M25 x 1.5**	2.17 (55)	.35 (9)	.51 (13)
SR-RM-5032-BR	**M50 x 1.5**	**M32 x 1.5**	2.17 (55)	.35 (9)	.51 (13)
SR-RM-5040-BR	**M50 x 1.5**	**M40 x 1.5**	2.17 (55)	.35 (9)	.51 (13)
SR-RM-6332-BR	**M63 x 1.5**	**M32 x 1.5**	2.56 (65)	.39 (10)	.55 (14)
SR-RM-6340-BR	**M63 x 1.5**	**M40 x 1.5**	2.56 (65)	.39 (10)	.55 (14)
SR-RM-6350-BR	**M63 x 1.5**	**M50 x 1.5**	2.56 (65)	.39 (10)	.55 (14)

Reducers - NPT to NPT Threads

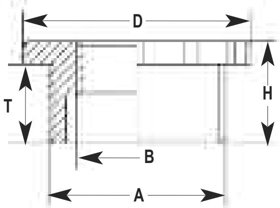
PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
	Male Thread **A**	Female Thread **B**	**W** Wrench Flat	**T** Thread Length	**H** Height
SR-RN-3412-BR	**3/4” NPT**	**1/2” NPT**	1.18 (30)	.71 (18)	.87 (22)
SR-RN-1034-BR	**1” NPT**	**3/4” NPT**	1.30 (33)	.98 (25)	1.14 (29)
SR-RN-5410-BR	**1-1/4” NPT**	**1” NPT**	1.69 (43)	.98 (25)	1.14 (29)

Adapters, Reducers & Enlargers

Reducers - Black & Gray Nylon

ISO 9001:2000 Certified
CERTIFICATE # 08-511

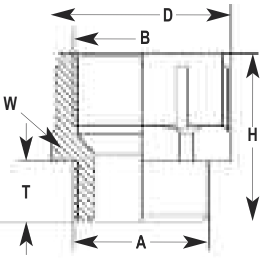
Type A



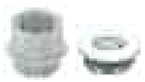
Reducers - PG to PG Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Outer Diameter	W Wrench Flat
SR-RR-0907-GY	**PG 9**	**PG 7**	B	.31 (8)	.55 (14)	.75 (19)	N/A
SR-RR-1109-GY	**PG 11**	**PG 9**	B	.31 (8)	.71 (18)	.89 (22.5)	N/A
SR-RR-1309-GY	**PG 13**	**PG 9**	A	.31 (8)	.47 (12)	1.06 (27)	N/A
SR-RR-1311-GY	**PG 13**	**PG 11**	B	.35 (9)	.83 (21)	1.0 (25.5)	N/A
SR-RR-1609-GY	**PG 16**	**PG 9**	A	.39 (10)	.51 (13)	1.14 (29)	N/A
SR-RR-1611-GY	**PG 16**	**PG 11**	A	.39 (10)	.51 (13)	1.14 (29)	N/A
SR-RR-1613-GY	**PG 16**	**PG 13**	B	.39 (10)	.98 (25)	1.13 (28.5)	N/A
SR-RR-2113-GY	**PG 21**	**PG 13**	A	.43 (11)	.53 (13.5)	1.42 (36)	N/A
SR-RR-2116-GY	**PG 21**	**PG 16**	A	.43 (11)	.53 (13.5)	1.42 (36)	N/A
SR-RR-2921-GY	**PG 29**	**PG 21**	A	.43 (11)	.53 (13.5)	1.81 (46)	N/A
SR-RR-3629-GY	**PG 36**	**PG 29**	A	.43 (11)	.59 (15)	2.28 (58)	N/A

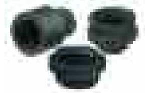
Type B



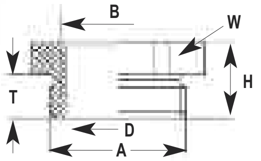
Reducers - Metric to Metric Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Outer Diameter	W Wrench Flat
SR-RR-1612-GY	**M16 x 1.5**	**M12 x 1.5**	B	.35 (9)	1.06 (27)	.87 (22)	.79 (20)
SR-RR-2016-GY	**M20 x 1.5**	**M16 x 1.5**	B	.35 (9)	1.06 (27)	1.06 (27)	.94 (24)
SR-RR-2520-GY	**M25 x 1.5**	**M20 x 1.5**	A	.39 (10)	.67 (17)	1.26 (32)	1.14 (29)
SR-RR-3225-GY	**M32 x 1.5**	**M25 x 1.5**	A	.47 (12)	.75 (19)	1.57 (40)	1.42 (36)
SR-RR-4032-GY	**M40 x 1.5**	**M32 x 1.5**	A	.47 (12)	.75 (19)	2.01 (51)	1.81 (46)
SR-RR-5040-GY	**M50 x 1.5**	**M40 x 1.5**	A	.55 (14)	.83 (21)	2.40 (61)	2.17 (55)
SR-RR-6350-GY	**M63 x 1.5**	**M50 x 1.5**	A	.59 (15)	.87 (22)	2.95 (75)	2.68 (68)

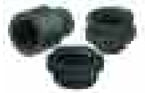
Reducers - Metric to Metric Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
	Male Thread A	Female Thread B		T Thread Length	H Height	D Inner Diameter	W Wrench Flat
SR-RM-1612-BK	**M16 x 1.5**	**M12 x 1.5**	C	.31 (8)	.55 (14)	.39 (10)	.79 (20)
SR-RM-2016-BK	**M20 x 1.5**	**M16 x 1.5**	C	.31 (8)	.55 (14)	.53 (13.5)	.98 (25)
SR-RM-2520-BK	**M25 x 1.5**	**M20 x 1.5**	C	.31 (8)	.55 (14)	.71 (18)	1.14 (29)
SR-RM-3225-BK	**M32 x 1.5**	**M25 x 1.5**	C	.39 (10)	.63 (16)	.91 (23)	1.42 (36)
SR-RM-4032-BK	**M40 x 1.5**	**M32 x 1.5**	D	.59 (15)	.79 (20)	1.18 (30)	N/A
SR-RM-5040-BK	**M50 x 1.5**	**M40 x 1.5**	D	.59 (15)	.79 (20)	1.50 (38)	N/A
SR-RM-6350-BK	**M63 x 1.5**	**M50 x 1.5**	D	.59 (15)	.79 (20)	1.89 (48)	N/A

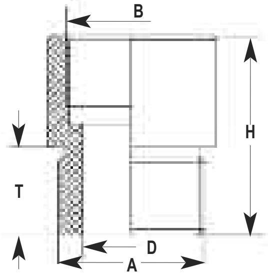
Type C



Reducers - NPT to NPT Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)		
	Male Thread A	Female Thread B		T Thread Length	H Height	D Inner Diameter
SR-RB-3412-02	**3/4" NPT**	**1/2" NPT**	C	.637 (16.2)	.887 (22.5)	.696 (17.7)
SR-RB-3438-02	**3/4" NPT**	**3/8" NPT**	C	.625 (15.9)	.875 (22.2)	.696 (17.7)
SR-RB-1012-02	**1" NPT**	**1/2" NPT**	C	.65 (16.5)	.90 (22.9)	.91 (23.1)
SR-RB-1034-02	**1" NPT**	**3/4" NPT**	C	.65 (16.5)	.90 (22.9)	.92 (23.4)
SR-RB-1214-02	**1/2" NPT**	**1/4" NPT**	C	.566 (14.4)	.816 (20.7)	.56 (14.2)
SR-RB-1238-02	**1/2" NPT**	**3/8" NPT**	C	.574 (14.6)	.824 (20.9)	.561 (14.2)

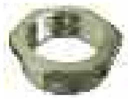
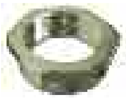
Type D



Adapters, Reducers & Enlargers

Reducers - Stainless Steel

Reducers - Metric to Metric Threads

PART NUMBERS		THREADS		DIMENSIONS IN INCHES (mm)		
without O-Ring 	w/ Buna-N O-Ring 	Male Thread A	Female Thread B	W Wrench Flat	T Thread Length	H Height
SR-RM-1612-SS	SR-RM-1612-SS-B	**M16 x 1.5**	**M12 x 1.5**	.67 (17)	.20 (5)	.35 (9)
SR-RM-2012-SS	SR-RM-2012-SS-B	**M20 x 1.5**	**M12 x 1.5**	.87 (22)	.24 (6)	.37 (9.5)
SR-RM-2016-SS	SR-RM-2016-SS-B	**M20 x 1.5**	**M16 x 1.5**	.87 (22)	.24 (6)	.37 (9.5)
SR-RM-2516-SS	SR-RM-2516-SS-B	**M25 x 1.5**	**M16 x 1.5**	1.06 (27)	.28 (7)	.41 (10.5)
SR-RM-2520-SS	SR-RM-2520-SS-B	**M25 x 1.5**	**M20 x 1.5**	1.06 (27)	.28 (7)	.41 (10.5)
SR-RM-3216-SS	SR-RM-3216-SS-B	**M32 x 1.5**	**M16 x 1.5**	1.34 (34)	.31 (8)	.49 (12.5)
SR-RM-3220-SS	SR-RM-3220-SS-B	**M32 x 1.5**	**M20 x 1.5**	1.34 (34)	.31 (8)	.49 (12.5)
SR-RM-3225-SS	SR-RM-3225-SS-B	**M32 x 1.5**	**M25 x 1.5**	1.34 (34)	.31 (8)	.49 (12.5)
SR-RM-4020-SS	SR-RM-4020-SS-B	**M40 x 1.5**	**M20 x 1.5**	1.46 (43)	.31 (8)	.51 (13)
SR-RM-4025-SS	SR-RM-4025-SS-B	**M40 x 1.5**	**M25 x 1.5**	1.46 (43)	.31 (8)	.51 (13)
SR-RM-4032-SS	SR-RM-4032-SS-B	**M40 x 1.5**	**M32 x 1.5**	1.46 (43)	.31 (8)	.51 (13)
SR-RM-5025-SS	SR-RM-5025-SS-B	**M50 x 1.5**	**M25 x 1.5**	2.17 (55)	.35 (9)	.59 (15)
SR-RM-5032-SS	SR-RM-5032-SS-B	**M50 x 1.5**	**M32 x 1.5**	2.17 (55)	.35 (9)	.59 (15)
SR-RM-5040-SS	SR-RM-5040-SS-B	**M50 x 1.5**	**M40 x 1.5**	2.17 (55)	.35 (9)	.59 (15)
SR-RM-6332-SS	SR-RM-6332-SS-B	**M63 x 1.5**	**M32 x 1.5**	2.56 (65)	.39 (10)	.65 (16.5)
SR-RM-6340-SS	SR-RM-6340-SS-B	**M63 x 1.5**	**M40 x 1.5**	2.56 (65)	.39 (10)	.65 (16.5)
SR-RM-6350-SS	SR-RM-6350-SS-B	**M63 x 1.5**	**M50 x 1.5**	2.56 (65)	.39 (10)	.65 (16.5)

The 316 material is much harder and ideal for direct exposure to salt water and chemical solutions in marine, off-shore, pharmaceutical, etc.

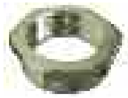
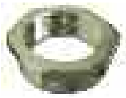
This special Stainless Steel Reducers are produced upon request only.

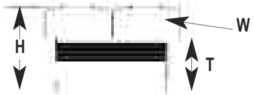
Please allow for longer delivery times.

Adapter, Reducer & Enlarger Applications:

- International machine builder & equipment
- Import / Export oriented projects
- Adapting to domestic markets

Reducers - Metric to Metric Threads

PART NUMBERS		THREADS		DIMENSIONS IN INCHES (mm)		
without O-Ring 	w/ Buna-N O-Ring 	Male Thread A	Female Thread B	W Wrench Flat	T Thread Length	H Height
SR-RP-0907-SS	SR-RQ-0907-SS	**PG 9**	**PG 7**	.67 (17)	.24 (6)	.34 (8.8)
SR-RP-1107-SS	SR-RQ-1107-SS	**PG 11**	**PG 7**	.87 (22)	.24 (6)	.35 (9)
SR-RP-1109-SS	SR-RQ-1109-SS	**PG 11**	**PG 9**	.87 (22)	.24 (6)	.35 (9)
SR-RP-1309-SS	SR-RQ-1309-SS	**PG 13**	**PG 9**	.87 (22)	.26 (6.5)	.37 (9.5)
SR-RP-1311-SS	SR-RQ-1311-SS	**PG 13**	**PG 11**	.87 (22)	.26 (6.5)	.37 (9.5)
SR-RP-1609-SS	SR-RQ-1609-SS	**PG 16**	**PG 9**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RP-1611-SS	SR-RQ-1611-SS	**PG 16**	**PG 11**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RP-1613-SS	SR-RQ-1613-SS	**PG 16**	**PG 13**	.94 (24)	.26 (6.5)	.37 (9.5)
SR-RP-2111-SS	SR-RQ-2111-SS	**PG 21**	**PG 11**	1.18 (30)	.28 (7)	.41 (10.3)
SR-RP-2113-SS	SR-RQ-2113-SS	**PG 21**	**PG 13**	1.18 (30)	.28 (7)	.41 (10.3)
SR-RP-2116-SS	SR-RQ-2116-SS	**PG 21**	**PG 16**	1.18 (30)	.28 (7)	.41 (10.3)
SR-RP-2916-SS	SR-RQ-2916-SS	**PG 29**	**PG 16**	1.57 (40)	.31 (8)	.45 (11.5)
SR-RP-2921-SS	SR-RQ-2921-SS	**PG 29**	**PG 21**	1.57 (40)	.31 (8)	.45 (11.5)
SR-RP-3621-SS	SR-RQ-3621-SS	**PG 36**	**PG 21**	1.97 (50)	.35 (9)	.49 (12.5)
SR-RP-3629-SS	SR-RQ-3629-SS	**PG 36**	**PG 29**	1.97 (50)	.35 (9)	.49 (12.5)
SR-RP-4229-SS	SR-RQ-4229-SS	**PG 42**	**PG 29**	2.24 (57)	.39 (10)	.53 (13.5)
SR-RP-4236-SS	SR-RQ-4236-SS	**PG 42**	**PG 36**	2.24 (57)	.39 (10)	.53 (13.5)
SR-RP-4836-SS	SR-RQ-4836-SS	**PG 48**	**PG 36**	2.52 (64)	.39 (10)	.53 (13.5)
SR-RP-4842-SS	SR-RQ-4842-SS	**PG 48**	**PG 42**	2.52 (64)	.39 (10)	.53 (13.5)



Buna-N O-Rings can be substituted with Silicone or Viton® O-Rings (see page 30).

To order, add "-S" (Silicone) or "-V" (Viton®) to part number (e.g. RM-1612-SS-V)

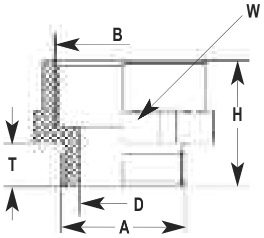
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Adapters, Reducers & Enlargers

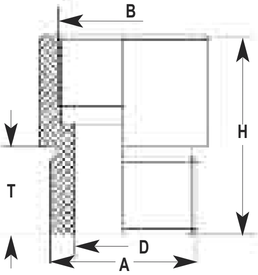
Enlargers - Nylon & Nickel Plated Brass

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Type A



Type C



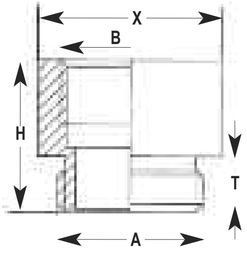
Enlargers - Metric to Metric Threads

PART NUMBERS	THREADS		ADAPTER TYPE	DIMENSIONS IN INCHES (mm)			
				T	H	D	W
	Male Thread A	Female Thread B		Thread Length	Height	Inner Diameter	Wrench Flat
SR-EM-1216-BK	**M12 x 1.5**	**M16 x 1.5**	A	.31 (8)	.79 (20)	.26 (6.5)	.83 (21)
SR-EM-1620-BK	**M16 x 1.5**	**M20 x 1.5**	A	.31 (8)	.83 (21)	.35 (9)	.98 (25)
SR-EM-2025-BK	**M20 x 1.5**	**M25 x 1.5**	A	.31 (8)	.91 (23)	.55 (14)	1.18 (30)
SR-EM-2532-BK	**M25 x 1.5**	**M32 x 1.5**	C	.59 (15)	1.18 (30)	.65 (16.5)	N/A
SR-EM-3240-BK	**M32 x 1.5**	**M40 x 1.5**	C	.59 (15)	1.36 (34.5)	.91 (23)	N/A
SR-EM-4050-BK	**M40 x 1.5**	**M50 x 1.5**	C	.59 (15)	1.36 (34.5)	1.18 (30)	N/A
SR-EM-5063-BK	**M50 x 1.5**	**M63 x 1.5**	C	.59 (15)	1.38 (35)	1.54 (39)	N/A

Is your thread size off by one size?

These Enlargers will solve that threading problem.

They convert holeswhich fit PG, NPT or Metric threads to a larger female thread of the same thread type.



Enlargers - PG to PG Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
			D	T	H
	Male Thread A	Female Thread B	Outer Diameter	Thread Length	Height
SR-EP-0709-BR	**PG 7**	**PG 9**	.67 (17)	.20 (5)	.59 (15)
SR-EP-0911-BR	**PG 9**	**PG 11**	.79 (20)	.24 (6)	.65 (16.5)
SR-EP-0913-BR	**PG 9**	**PG 13**	.87 (22)	.24 (6)	.69 (17.5)
SR-EP-1113-BR	**PG 11**	**PG 13**	.87 (22)	.24 (6)	.69 (17.5)
SR-EP-1116-BR	**PG 11**	**PG 16**	.94 (24)	.24 (6)	.73 (18.5)
SR-EP-1121-BR	**PG 11**	**PG 21**	1.18 (30)	.24 (6)	.81 (20.5)
SR-EP-1316-BR	**PG 13**	**PG 16**	.94 (24)	.26 (6.5)	.75 (19)
SR-EP-1321-BR	**PG 13**	**PG 21**	1.18 (30)	.26 (6.5)	.83 (21)
SR-EP-1621-BR	**PG 16**	**PG 21**	1.18 (30)	.26 (6.5)	.83 (21)
SR-EP-1629-BR	**PG 16**	**PG 29**	1.54 (39)	.26 (6.5)	.88 (22.5)
SR-EP-2129-BR	**PG 21**	**PG 29**	1.54 (39)	.28 (7)	.91 (23)
SR-EP-2936-BR	**PG 29**	**PG 36**	1.97 (50)	.31 (8)	1.08 (27.5)
SR-EP-3642-BR	**PG 36**	**PG 42**	2.24 (57)	.35 (9)	1.22 (31)
SR-EP-4248-BR	**PG 42**	**PG 48**	2.52 (64)	.39 (10)	1.30 (33)

Optional Locking Nuts, O-Rings & Other Accessories starting at page 28.

Enlargers - PG to PG Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
			D	T	H
	Male Thread A	Female Thread B	Outer Diameter	Thread Length	Height
SR-EN-1234-BR	**1/2” NPT**	**3/4” NPT**	1.10 (28)	.79 (20)	1.50 (38)
SR-EN-1210-BR	**1/2” NPT**	**1” NPT**	1.36 (34.5)	.79 (20)	1.75 (44.5)
SR-EN-3410-BR	**3/4” NPT**	**1” NPT**	1.38 (35)	.71 (18)	1.69 (43)
SR-EN-1054-BR	**1” NPT**	**1-1/4” NPT**	1.73 (44)	.94 (24)	1.97 (50)

Enlargers - PG to PG Threads

PART NUMBERS	THREADS		DIMENSIONS IN INCHES (mm)		
			D	T	H
	Male Thread A	Female Thread B	Outer Diameter	Thread Length	Height
SR-EM-1216-BR	**M12 x 1.5**	**M16 x 1.5**	.71 (18)	.20 (5)	.59 (15)
SR-EM-1620-BR	**M16 x 1.5**	**M20 x 1.5**	.87 (22)	.24 (6)	.69 (17.5)
SR-EM-2025-BR	**M20 x 1.5**	**M25 x 1.5**	1.06 (27)	.26 (6.5)	.75 (19)
SR-EM-2532-BR	**M25 x 1.5**	**M32 x 1.5**	1.34 (34)	.26 (6.5)	.83 (21)
SR-EM-3240-BR	**M32 x 1.5**	**M40 x 1.5**	1.65 (42)	.28 (7)	.91 (23)
SR-EM-4050-BR	**M40 x 1.5**	**M50 x 1.5**	2.09 (53)	.35 (9)	1.22 (31)
SR-EM-5063-BR	**M50 x 1.5**	**M63 x 1.5**	2.60 (66)	.35 (9)	1.22 (31)

Conduit System

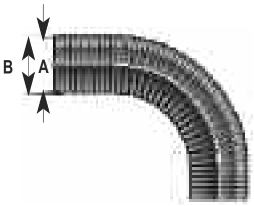
Corrugated Conduit - (Standard & Super Flex)

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Corrugated Conduit (Standard & Super Flex)

PART NUMBERS		Nominal Conduit Size	Roll Length (feet)	DIMENSIONS	FITS TURN-TO-SEAL FITTINGS
Standard Modified Polyamide PA 6	**SuperFlex** Thermoplastic Elastomer			Inner Dia.(A) x Outer Dia.(B) Inches (mm)	ST & ET
SR-SM-0811-BK	-	**8**	**164**	.33 x .44 (8.5 x 11.2)	PG 7, 1/4” NPT
SR-SM-1013-BK	SR-SM-1013-HY	**10**	**164**	.39 x .51 (10 x 13)	PG 7, 1/4” NPT, PG 9
SR-SM-1216-BK	SR-SM-1216-HY	**12**	**164**	.47 x .61 (12 x 15.5)	PG 11, 3/8” NPT
SR-SM-1419-BK	-	**14**	**164**	.55 x .73 (14 x 18.5)	PG 13
SR-SM-1721-BK	SR-SM-1721-HY	**17**	**164**	.65 x .83 (16.5 x 21)	PG 16, 1/2” NPT
SR-SM-2328-BK	SR-SM-2328-HY	**23**	**164**	.89 x 1.12 (22.5 x 28.5)	PG 21, 3/4” NPT
SR-SM-2934-BK	SR-SM-2934-HY	**29**	**82**	1.12 x 1.36 (28.5 x 34.5)	PG 29, 1” NPT
SR-SM-3642-BK	SR-SM-3642-HY	**37**	**82**	1.42 x 1.65 (36 x 42)	PG 36, 1-1/4” NPT
SR-SM-4854-BK	SR-SM-4854-HY	**50**	**82**	1.87 x 2.13 (47.5 x 54)	PG 48, 2” NPT

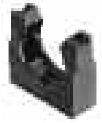
This **STANDARD** Corrugated Conduit is made of flame retardant Nylon. The Conduit is suitable for static and moderate dynamic installations. The **SUPER-FLEX** Conduit is made of a special plastic blend. Due to its higher flexibility, it is an ideal solution for drag chain and robotics applications. Sizes 8 & 14 are not available in this material.



Conduit System

Snap-In Mounting Brackets

Snap-In Mounting Brackets

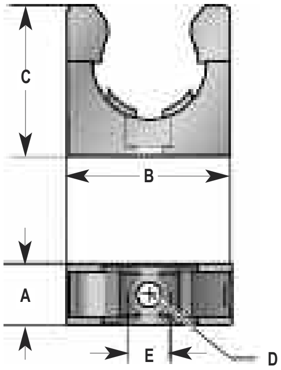
PART NUMBERS	Fits Nominal Conduit Size	DIMENSIONS				
		A	B	C	D	E
		Width	Length	Height	Mounting Hole	Mounting Hole Recess
SR-MB-09-BK	**10**	.47 (12)	1.18 (30)	.91 (23)	.20 (5)	.35 (9)
SR-MB-11-BK	**12**	.47 (12)	1.18 (30)	.91 (23)	.20 (5)	.39 (10)
SR-MB-16-BK	**17**	.59 (15)	1.38 (35)	1.18 (30)	.24 (6)	.47 (12)
SR-MB-21-BK	**23**	.63 (16)	1.65 (42)	1.50 (38)	.26 (6.5)	.47 (12)
SR-MB-29-BK	**29**	.63 (16)	2.01 (51)	1.93 (49)	.26 (6.5)	.47 (12)
SR-MB-36-BK	**37**	.71 (18)	2.40 (61)	2.01 (51)	.26 (6.5)	.47 (12)
SR-MB-48-BK	**50**	.75 (19)	2.91 (74)	2.52 (64)	.26 (6.5)	.47 (12)

Electrical Conduit provides protection to enclosed single or multi-conductors from impact, moisture, and chemical vapors. Varying quantities, sizes, and types of conductors can be pulled into a Conduit, which simplifies design and construction compared to multiple runs of cables or the expense of customized composite cables.

Conduit Systems can be made waterproof. Cable connections between fixed and moving parts are weak spots in machine & system installations. When cables are bent, individual tensioned conductors have no room for flexing. They are subjected to high and variable tension forces, particularly multi-conductor cables. To prevent conductor breakages, the use of Conduit tubing is recommended.

Advantages:

- Individual conductors are given sufficient flexibility. This prevents tension stress.
- Connections provide security against penetration of fluids.



Holds conduit securely in place.
Material: Black Nylon 6/6

Conduit System

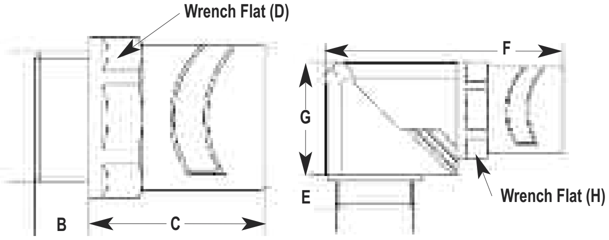
Push-In Conduit Fittings

ISO 9001:2000 Certified
CERTIFICATE # 08-511

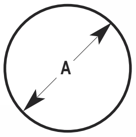
Push-In Conduit Fittings

PART NUMBERS		Thread Type & Size	Fits Nominal Conduit Size	Straight Fittings - Dimensions in Inches (mm)				Elbow Fitting - Dimensions in Inches (mm)				
Straight Fitting	Elbow Fitting	See page 49 for thread specs		A Clearance Hole	B Thread Length	C Body Length	D Wrench Flat	A Clearance Hole	E Thread Length	F Body Height	G Body Length	H Wrench Flat
SR-SM09AA-BK	SR-EM09AA-BK	**PG 9**	**10**	.60 (15.2)	.31 (8)	.91 (23)	.67 (17)	.60 (15.2)	.31 (8)	1.69 (43)	.91 (23)	.75 (19)
SR-SM11AA-BK	SR-EM11AA-BK	**PG 11**	**12**	.73 (18.5)	.31 (8)	.98 (25)	.83 (21)	.73 (18.5)	.31 (8)	1.89 (48)	1.06 (27)	.87 (22)
SR-SM13AA-BK	SR-EM13AA-BK	**PG 13**	**14**	.80 (20.3)	.35 (9)	1.10 (28)	.94 (24)	.80 (20.3)	.35 (9)	2.04 (52)	1.20 (30.5)	.94 (24)
SR-SM16AA-BK	SR-EM16AA-BK	**PG 16**	**17**	.88 (22.3)	.39 (10)	1.14 (29)	1.06 (27)	.88 (22.3)	.39 (10)	2.20 (56)	1.28 (32.5)	1.06 (27)
SR-SM21AA-BK	SR-EM21AA-BK	**PG 21**	**23**	1.12 (28.4)	.43 (11)	1.26 (32)	1.38 (35)	1.12 (28.4)	.43 (11)	2.76 (70)	1.57 (40)	1.30 (33)
SR-SM29AA-BK	SR-EM29AA-BK	**PG 29**	**29**	1.47 (37.3)	.43 (11)	1.38 (35)	1.65 (42)	1.47 (37.3)	.43 (11)	3.27 (83)	2.03 (51.5)	1.65 (42)
SR-SM36AA-BK	-	**PG 36**	**37**	1.85 (47)	.51 (13)	1.61 (41)	1.97 (50)	-	-	-	-	-
SR-SM48AA-BK	-	**PG 48**	**50**	2.34 (59.4)	.55 (14)	1.81 (46)	2.52 (64)	-	-	-	-	-
SR-SM09NA-BK	SR-EM09NA-BK	**3/8” NPT**	**10**	.68 (17.2)	.60 (15)	.91 (23)	.67 (17)	.68 (17.2)	.60 (15)	1.69 (43)	.91 (23)	.75 (19)
SR-SM16NA-BK	SR-EM16NA-BK	**1/2” NPT**	**17**	.83 (21.1)	.51 (13)	1.14 (29)	1.06 (27)	.83 (21.1)	.51 (13)	2.20 (56)	1.28 (32.5)	1.06 (27)
SR-SM21NA-BK	SR-EM21NA-BK	**3/4” NPT**	**23**	1.05 (26.7)	.51 (13)	1.26 (32)	1.38 (35)	1.05 (26.7)	.51 (13)	2.76 (70)	1.57 (40)	1.30 (33)
SR-SM29NA-BK	SR-EM29NA-BK	**1” NPT**	**29**	1.35 (34.3)	.59 (15)	1.38 (35)	1.65 (42)	1.35 (34.3)	.59 (15)	3.27 (83)	2.03 (51.5)	1.65 (42)
SR-SM16MA-BK	SR-EM16MA-BK	**M16 x 1.5**	**10**	.63 (16)	.31 (8)	.91 (23)	.67 (17)	.63 (16)	.31 (8)	1.69 (43)	.91 (23)	.75 (19)
SR-SM20MA-BK	SR-EM20MA-BK	**M20 x 1.5**	**14**	.79 (20)	.35 (9)	1.10 (28)	.94 (24)	.79 (20)	.35 (9)	2.04 (52)	1.20 (30.5)	.94 (24)
SR-SM25MA-BK	SR-EM25MA-BK	**M25 x 1.5**	**23**	.98 (25)	.43 (11)	1.26 (32)	1.38 (35)	.98 (25)	.43 (11)	2.76 (70)	1.57 (40)	1.30 (33)
SR-SM32MA-BK	SR-EM32MA-BK	**M32 x 1.5**	**29**	1.26 (32)	.43 (11)	1.38 (35)	1.65 (42)	1.26 (32)	.43 (11)	3.27 (83)	2.03 (51.5)	1.65 (42)

SM - Straight
Nylon Conduit to a Push-in Fitting. The Nylon Conduit is inserted into the Fitting until the hook snaps over the ridge of the Corrugated Tubing. The Conduit can be mounted rigid for liquid tight (NEMA 4x) or turnable for non-liquid tight (NEMA 2).



EM - 90° Snap Elbows
Combines the unique 90° Snap Elbow and Straight Push-in Fitting for easy installation of wires into an Elbow Fitting. The “Straight” Elbow is snapped together after the wires have been installed, resulting in a liquid tight 90° Elbow.



Suggested Clearance Hole for Non-Threaded Mounting

Optional Locking Nuts, O-Rings & Other Accessories starting at page 28.

SM & EM Fittings feature a Locking Ridge to hold Conduit Tubing in place. They also have an O-Ring groove for optional O-Ring installation.

Conduit System

Turn-To-Seal - Conduit Fittings

ISO 9001:2000 Certified
CERTIFICATE # 08-511

The **Turn-to-Seal** family consists of Conduit Fittings manufactured from high-grade polyamide. This design means that the Fittings offer a high protection rating of IP 65 (NEMA 4). The Fittings are completely pre-assembled and no additional parts such as cap nuts and clamping rings need to be fitted, ensuring reliability in assembly. The cable protection Conduit can be assembled quickly and easily by simply inserting the Conduit and turning the cap nut. The Elbow has smooth inside walls, making the installation of cables & wires easy.

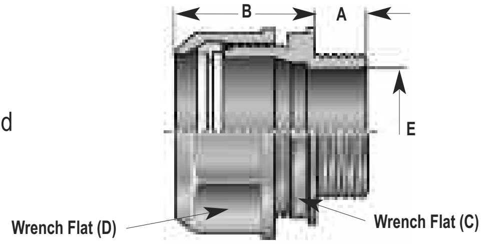
Turn-To-Seal Conduit Fittings

PART NUMBERS		Thread Type & Size See page 49 for thread specs	Fits Nominal Conduit Size	Straight Fittings - Dimensions in Inches (mm)					Elbow - Dimensions in Inches (mm)				
				A	B	C	D	E	F	G	H	I	J
				Thread Length	Body Length	Wrench Flat (Body)	Wrench Flat (Dome)	Inside Diamter	Thread Length	Elbow Length	Elbow Height	Wrench Flat (Dome)	Inside Diameter
SR-ST07AA-BK	-	**PG 7**	**10**	.31 (8)	1.02 (26)	.75 (19)	.87 (22)	.31 (8)	-	-	-	-	-
SR-ST07AR-BK	-	**PG 7**	**8**	.31 (8)	1.02 (26)	.75 (19)	.87 (22)	.31 (8)	-	-	-	-	-
SR-ST09AA-BK	SR-ET09AA-BK	**PG 9**	**10**	.31 (8)	1.02 (26)	.75 (19)	.87 (22)	.43 (11)	.30 (7.5)	1.77 (45)	1.02 (26)	.87 (22)	.39 (10)
SR-ST11AA-BK	SR-ET11AA-BK	**PG 11**	**12**	.31 (8)	1.02 (26)	.87 (22)	.94 (24)	.55 (14)	.31 (8)	2.01 (51)	1.10 (28)	.94 (24)	.51 (13)
SR-ST16AA-BK	SR-ET16AA-BK	**PG 16**	**17**	.31 (8)	1.02 (26)	1.06 (27)	1.18 (30)	.67 (17)	.39 (10)	2.20 (56)	1.26 (32)	1.18 (30)	.63 (16)
SR-ST21AA-BK	SR-ET21AA-BK	**PG 21**	**23**	.39 (10)	1.38 (35)	1.46 (37)	1.50 (38)	.91 (23)	.43 (11)	2.64 (67)	1.50 (38)	1.50 (38)	.87 (22)
SR-ST29AA-BK	SR-ET29AA-BK	**PG 29**	**29**	.39 (10)	1.38 (35)	1.77 (45)	1.81 (46)	1.22 (31)	.47 (12)	3.23 (82)	1.97 (50)	1.81 (46)	1.14 (29)
SR-ST36AA-BK	-	**PG 36**	**37**	.59 (15)	1.81 (46)	2.17 (55)	2.40 (61)	1.54 (39)	-	-	-	-	-
SR-ST48AA-BK	-	**PG 48**	**50**	.59 (15)	1.97 (50)	2.52 (64)	2.91 (74)	2.01 (51)	-	-	-	-	-
SR-ST11NA-BK	SR-ET11NA-BK	**3/8" NPT**	**12**	.55 (14)	1.02 (26)	.87 (22)	.94 (24)	.47 (12)	.31 (8)	2.01 (51)	1.10 (28)	.94 (24)	.51 (13)
SR-ST16NA-BK	SR-ET16NA-BK	**1/2" NPT**	**17**	.51 (13)	1.02 (26)	1.06 (27)	1.18 (30)	.55 (14)	.39 (10)	2.20 (56)	1.26 (32)	1.18 (30)	.63 (16)
SR-ST21NA-BK	SR-ET21NA-BK	**3/4" NPT**	**23**	.55 (14)	1.38 (35)	1.46 (37)	1.50 (38)	.75 (19)	.43 (11)	2.64 (67)	1.50 (38)	1.50 (38)	.83 (21)
SR-ST29NA-BK	SR-ET29NA-BK	**1" NPT**	**29**	.75 (19)	1.38 (35)	1.81 (46)	1.81 (46)	1.02 (26)	.47 (12)	3.23 (82)	1.97 (50)	1.81 (46)	1.06 (27)
SR-ST36NA-BK	-	**1-1/4" NPT**	**37**	.71 (18)	1.81 (46)	2.17 (55)	2.40 (61)	1.38 (35)	-	-	-	-	-

ST & ET Fittings are V0 rated & have IP 65 protection without additional parts (O-Ring or Seal Ring).

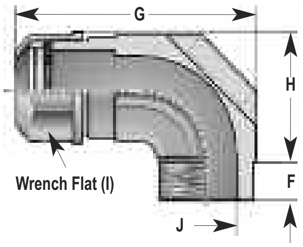
ST - Straight Conduit Fittings with plastic thread

- Reliable assembly as fitting is supplied pre-assembled.No additional parts required
- Integrated clamping ring ensures high tear-out strength
- High protection to IP 65 (NEMA 4) without additional parts
- Can be opened without tools



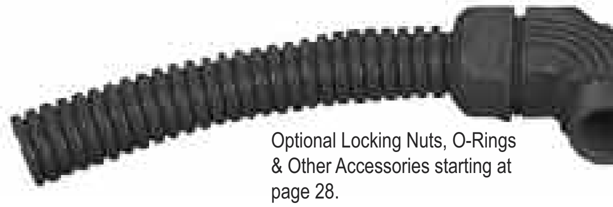
ET - 90° Angled Conduit Fittings with plastic thread

- Reliable assembly as fitting is supplied pre-assembled.
- No additional parts required
- Integrated clamping ring ensures high tear-out strength
- High protection to IP 65 without additional parts
- Can be opened without tools
- Smooth inside walls, therefore easy insertion of the cables into the 90° angle



Advantages:

- High protection rating of IP 65 (NEMA 4)
- One-part fitting
- Rapid assembly
- High pull-out resistance
- Inner contours of 90° fittings are rounded



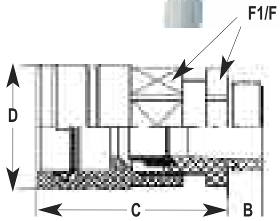
Optional Locking Nuts, O-Rings & Other Accessories starting at page 28.

Conduit System

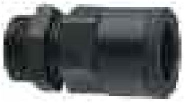
Conduit Fittings: Snapclic DUO

ISO 9001:2000 Certified
CERTIFICATE # 08-511

- Combination of Strain Relief & Conduit Fittings
- Push-in system
- Partially rotatable
- Can be equipped with Multi-Hole inserts
- Metal style can be changed to EMI/RFI



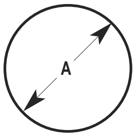
Snapclic DUO - Nylon



PART NUMBERS	CABLE RANGE Inches (mm)	Thread Type & Size See page 49 for thread specs	Fits Nominal Conduit Size	A Hole O.D. +.01" (+.25mm)	B Tread Length	C Body Length	D Outer Diameter	F1/F Wrench Flat
SR-DUO11AA-BK SR-DUO11AR-BK	.20 - .39 (5 - 10) .12 - .28 (3 - 7)	PG 11	10	.73 (18.5)	.31 (8)	1.65 (42)	.98 (25)	.87 (22)
SR-DUO13AA-BK SR-DUO13AR-BK	.24 - .47 (6 - 12) .20 - .35 (5 - 9)	PG 13	12	.80 (20.3)	.35 (9)	1.73 (44)	.98 (25)	.94 (24)
SR-DUO16AA-BK SR-DUO16AR-BK	.39 - .55 (10 - 14) .28 - .47 (7 - 12)	PG 16	14	.88 (22.3)	.39 (10)	1.81 (46)	1.18 (30)	1.06 (27)
SR-DUO21AA-BK SR-DUO21AR-BK	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	PG 21	17	1.12 (28.4)	.43 (11)	1.97 (50)	1.38 (35)	1.30 (33)
SR-DUO29AA-BK SR-DUO29AR-BK	.71 - .94 (18 - 24) .51 - .79 (13 - 20)	PG 29	23	1.47 (37.3)	.43 (11)	2.36 (60)	1.65 (42)	1.65 (42)
SR-DUO36AA-BK SR-DUO36AR-BK	.87 - 1.22 (22 - 31) .79 - 1.02 (20 - 26)	PG 36	29	1.85 (47)	.51 (13)	2.36 (60)	1.97 (50)	2.09 (53)
SR-DUO16MA-BK SR-DUO16MR-BK	.20 - .39 (5 - 10) .12 - .28 (3 - 7)	M16 x 1.5	10	.63 (16)	.31 (8)	1.65 (42)	.98 (25)	.87 (22)
SR-DUO20MA-BK SR-DUO20MR-BK	.24 - .47 (6 - 12) .20 - .35 (5 - 9)	M20 x 1.5	12	.79 (20)	.35 (9)	1.73 (44)	.98 (25)	.94 (24)
SR-DUO22MA-BK SR-DUO22MR-BK	.39 - .55 (10 - 14) .28 - .47 (7 - 12)	M20 x 1.5	14	.79 (20)	.39 (10)	1.81 (46)	1.18 (30)	1.06 (27)
SR-DUO25MA-BK SR-DUO25MR-BK	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	M25 x 1.5	17	.98 (25)	.43 (11)	1.97 (50)	1.38 (35)	1.30 (33)
SR-DUO32MA-BK SR-DUO32MR-BK	.71 - .94 (18 - 24) .51 - .79 (13 - 20)	M32 x 1.5	23	1.26 (32)	.43 (11)	2.36 (60)	1.65 (42)	1.65 (42)
SR-DUO40MA-BK SR-DUO40MR-BK	.87 - 1.22 (22 - 31) .79 - 1.02 (20 - 26)	M40 x 1.5	29	1.57 (40)	.51 (13)	2.36 (60)	1.97 (50)	2.09 (53)

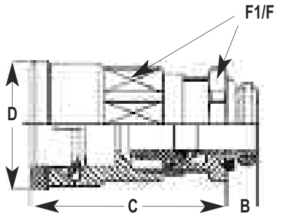
Snapclic DUO - Nickel Plated Brass

PART NUMBERS	CABLE RANGE Inches (mm)	Thread Type & Size See page 49 for thread specs	Fits Nominal Conduit Size	A Hole O.D. +.01" (+.25mm)	B Tread Length	C Body Length	D Outer Diameter	F1/F Wrench Flat
SR-DUO11AA-BR SR-DUO11AR-BR	.20 - .39 (5 - 10) .12 - .28 (3 - 7)	PG 11	10	.73 (18.5)	.24 (6)	1.52 (38.5)	.91 (23)	.79 (20)
SR-DUO13AA-BR SR-DUO13AR-BR	.24 - .47 (6 - 12) .20 - .35 (5 - 9)	PG 13	12	.80 (20.3)	.24 (6)	1.56 (39.5)	.98 (25)	.87 (22)
SR-DUO16AA-BR SR-DUO16AR-BR	.39 - .55 (10 - 14) .28 - .47 (7 - 12)	PG 16	14	.88 (22.3)	.24 (6)	1.63 (41.5)	1.14 (29)	.94 (24)
SR-DUO21AA-BR SR-DUO21AR-BR	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	PG 21	17	1.12 (28.4)	.28 (7)	1.75 (44.5)	1.18 (30)	1.18 (30)
SR-DUO29AA-BR SR-DUO29AR-BR	.71 - .94 (18 - 24) .51 - .79 (13 - 20)	PG 29	23	1.47 (37.3)	.31 (8)	2.07 (52.5)	1.54 (39)	1.57 (40)
SR-DUO36AA-BR SR-DUO36AR-BR	.87 - 1.22 (22 - 31) .79 - 1.02 (20 - 26)	PG 36	29	1.85 (47)	.31 (8)	2.32 (59)	1.77 (45)	1.97 (50)
SR-DUO16MA-BR SR-DUO16MR-BR	.20 - .39 (5 - 10) .12 - .28 (3 - 7)	M16 x 1.5	10	.63 (16)	.24 (6)	1.52 (38.5)	.91 (23)	.79 (20)
SR-DUO20MA-BR SR-DUO20MR-BR	.24 - .47 (6 - 12) .20 - .35 (5 - 9)	M20 x 1.5	12	.79 (20)	.24 (6)	1.56 (39.5)	.98 (25)	.87 (22)
SR-DUO22MA-BR SR-DUO22MR-BR	.39 - .55 (10 - 14) .28 - .47 (7 - 12)	M20 x 1.5	14	.79 (20)	.24 (6)	1.63 (41.5)	1.14 (29)	.94 (24)
SR-DUO25MA-BR SR-DUO25MR-BR	.51 - .71 (13 - 18) .35 - .63 (9 - 16)	M25 x 1.5	17	.98 (25)	.28 (7)	1.75 (44.5)	1.18 (30)	1.18 (30)
SR-DUO32MA-BR SR-DUO32MR-BR	.71 - .94 (18 - 24) .51 - .79 (13 - 20)	M32 x 1.5	23	1.26 (32)	.31 (8)	2.07 (52.5)	1.54 (39)	1.57 (40)
SR-DUO40MA-BR SR-DUO40MR-BR	.87 - 1.22 (22 - 31) .79 - 1.02 (20 - 26)	M40 x 1.5	29	1.57 (40)	.31 (8)	2.32 (59)	1.77 (45)	1.97 (50)



Suggested Clearance Hole for Non-Threaded Mounting

Optional Locking Nuts, O-Rings & Other Accessories starting at page 28.



Conduit System

Conduit Fittings - Double-Seal & Bulkhead

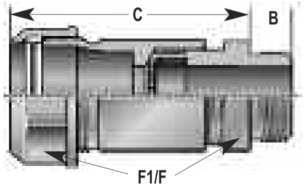
ISO 9001:2000 Certified
CERTIFICATE # 08-511

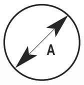
Double-Seal Fittings

PART NUMBERS	Thread Type & Size See page 49 for thread specs	CABLE RANGE Inches (mm)	Fits Nominal Conduit Size	DIMENSIONS IN INCHES (mm)			
				A Hole O.D. +.01" (+.25mm)	B Tread Length	C Body Length	F1/F Wrench Flat
SR-DS09AA-BK	**PG 9**	.16 - .31 (4 - 8)	**10**	.60 (15.2)	.31 (8)	1.73 (44)	.75 (19) / .87 (22)
SR-DS11AA-BK	**PG 11**	.20 - .39 (5 - 10)	**12**	.73 (18.5)	.31 (8)	1.85 (47)	.87 (22) / .95 (24)
SR-DS13AA-BK	**PG 13**	.24 - .47 (6 - 12)	**17**	.80 (20.3)	.35 (9)	1.93 (49)	.95 (24) / 1.18 (30)
SR-DS16AA-BK	**PG 16**	.39 - .55 (10 - 14)	**17**	.88 (22.3)	.39 (10)	1.97 (50)	1.06 (27) / 1.18 (30)
SR-DS21AA-BK	**PG 21**	.51 - .71 (13 - 18)	**23**	1.12 (28.4)	.43 (11)	2.32 (59)	1.30 (33) / 1.50 (38)
SR-DS09NA-BK	**3/8" NPT**	.16 - .31 (4 - 8)	**10**	.68 (17.2)	.59 (15)	2.01 (51)	.75 (19) / .87 (22)
SR-DS13NA-BK	**1/2" NPT**	.24 - .47 (6 - 12)	**17**	.83 (21.1)	.51 (13)	2.09 (53)	.95 (24) / 1.18 (30)
SR-DS16NA-BK	**1/2" NPT**	.39 - .55 (10 - 14)	**17**	.83 (21.1)	.51 (13)	2.09 (53)	1.06 (27) / 1.18 (30)
SR-DS21NA-BK	**3/4" NPT**	.51 - .71 (13 - 18)	**23**	1.05 (26.7)	.51 (13)	2.40 (61)	1.30 (33) / 1.50 (38)
SR-DS16MA-BK	**M16 x 1.5**	.16 - .31 (4 - 8)	**10**	.63 (16)	.31 (8)	1.73 (44)	.75 (19) / .87 (22)
SR-DS20MA-BK	**M20 x 1.5**	.24 - .47 (6 - 12)	**17**	.79 (20)	.35 (9)	1.93 (49)	.95 (24) / 1.18 (30)
SR-DS25MA-BK	**M25 x 1.5**	.51 - .71 (13 - 18)	**23**	.98 (25)	.43 (11)	2.32 (59)	1.30 (33) / 1.50 (38)

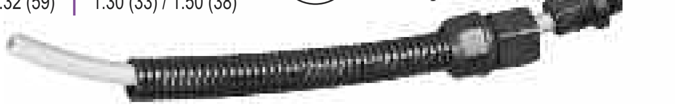
Advantages:

- Combined Conduit and Cable Fitting 2-in-1
- Clamping around entire circumference, ensuring maximum pull-out resistance
- No loose parts - Fitting does not have to be dismantled for assembly
- High degree of protection





Suggested Clearance Hole for Non-Threaded Mounting



Advantages:

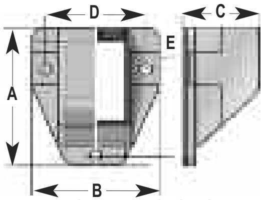
- Split system enables pre-assembled cables to be inserted by means of removable upper part
- Easy assembly
- High stability
- Supplied with gasket for flange connection.
- Internal thread for Metric and PG Fittings

Bulkhead Conduit Fittings with Thread

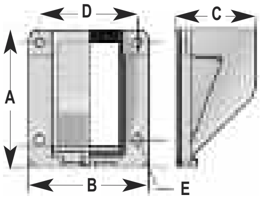
PART NUMBERS	Thread Type & Size See page 49 for thread specs	Fits Nominal Conduit Size	DIMENSIONS IN INCHES (mm)				
			A Length	B Width	C Height	D Distance between Holes	E Hole Diameter
SR-FL-11-BK	**PG 11**	**12**	1.93 (49)	1.85 (47)	1.38 (35)	1.46 (37)	.20 (5)
SR-FL-13-BK	**PG 16**	**17**	1.93 (49)	1.85 (47)	1.38 (35)	1.46 (37)	.20 (5)
SR-FL-21-BK	**PG 21**	**23**	2.72 (69)	2.56 (65)	1.73 (44)	2.05 (52)	.26 (6.5)
SR-FL-29-BK	**PG 29**	**29**	3.54 (90)	3.07 (78)	2.17 (55)	2.56 (65)	.28 (7)
SR-FL-36-BK	**PG 36**	**37**	3.94 (100)	3.70 (94)	2.60 (66)	3.15 (80)	.28 (7)
SR-FL-48-BK	**PG 48**	**50**	4.57 (116)	3.98 (101)	2.99 (76)	3.46 (88)	.28 (7)

Advantages:

- Split system enables pre-assembled cables to be inserted by means of removable upper part
- Easy assembly
- High stability
- Supplied with gasket for flange connection.
- Conduit remains rotatable



(up to M25 / PG 21)



(from to M32 / PG 29)

Bulkhead Conduit Fittings without Thread

PART NUMBERS	Fits Nominal Conduit Size	DIMENSIONS IN INCHES (mm)				
		A Length	B Width	C Height	D Distance between Holes	E Hole Diameter
SR-FT-11-BK	**12**	1.93 (49)	1.85 (47)	1.38 (35)	1.46 (37)	.20 (5)
SR-FT-13-BK	**17**	1.93 (49)	1.85 (47)	1.38 (35)	1.46 (37)	.20 (5)
SR-FT-21-BK	**23**	2.72 (69)	2.56 (65)	1.73 (44)	2.05 (52)	.26 (6.5)
SR-FT-29-BK	**29**	3.54 (90)	3.07 (78)	2.17 (55)	2.56 (65)	.28 (7)
SR-FT-36-BK	**37**	3.94 (100)	3.70 (94)	2.60 (66)	3.15 (80)	.28 (7)
SR-FT-48-BK	**50**	4.57 (116)	3.98 (101)	2.99 (76)	3.46 (88)	.28 (7)

Notes:

CIRCULAR CONNECTORS

Signal Connectors, Power Connectors,
Push-Pull Connectors
14-1, 14-2, 14-3

ESTCO
Circular Connectors

Circular Connectors

M23, M40, M16, PUSH PULL

M23: Signal Connectors

IP 67 NEMA 4X

Technical:

Number of Contacts:	6 - 19
Amp Rating:	8 - 20
Voltage Rating:	150 - 300
Cable OD:	3 - 14 mm (.12” - .55”)
Temperature:	-40°C to 125°C (-40°F to 257°F)
Wire Gauge:	28 - 12 AWG

Stainless Steel
Nickel Plated Brass
Standard / EMI
Over Molded

M23: Power Connectors

IP 67 NEMA 4X

Technical:

Number of Contacts:	6 - 8
Amp Rating:	8 - 28
Voltage Rating:	300 - 800
Cable OD:	7 - 17 mm (.28” - .67”)
Temperature:	-40°C to 125°C (-40°F to 257°F)
Wire Gauge:	24 - 12 AWG

Stainless Steel
Nickel Plated Brass
Standard / EMI
Over Molded

M40: Power Connectors

IP 67 NEMA 4X

Technical:

Material:	Nickel Plated Brass
Number of Contacts:	6 - 8
Amp Rating:	28 - 55
Voltage Rating:	300 - 800
Cable OD:	13 - 28 mm (.51”-1.10”)
Wire Gauge:	20 - 6 AWG
Temperature:	-40°C to 125°C (-40°F to 257°F)

RUGGED
For Up To 55A
Applications!

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Circular Connectors

M23, M40, M16, PUSH PULL

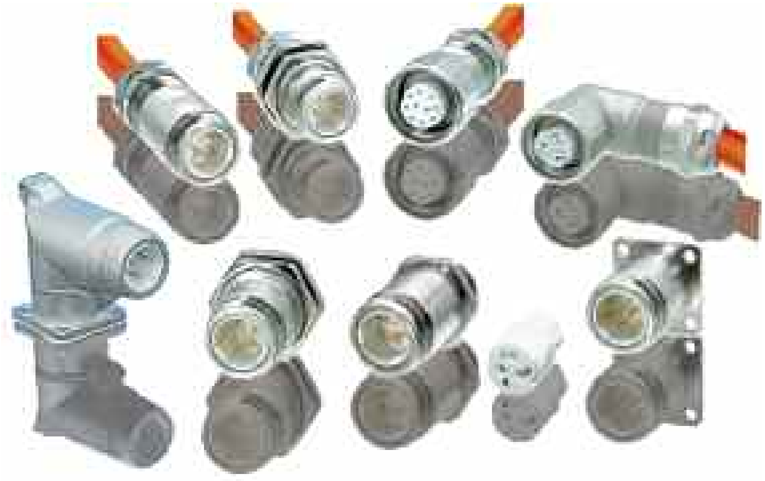
Technical:

M16: Signal Connectors

IP 67 NEMA 4X

Material:	Nickel Plated Brass Die Cast Aluminum
Number of Contacts:	3 & 10
Amp Rating:	8 - 20
Voltage Rating:	160 - 400
Cable OD:	2 - 9 mm (.08”-.35”)
Wire Gauge:	26 - 17 AWG
Temperature:	-40°C to 125°C (-40°F to 257°F)

30% Smaller Than M23 Size!

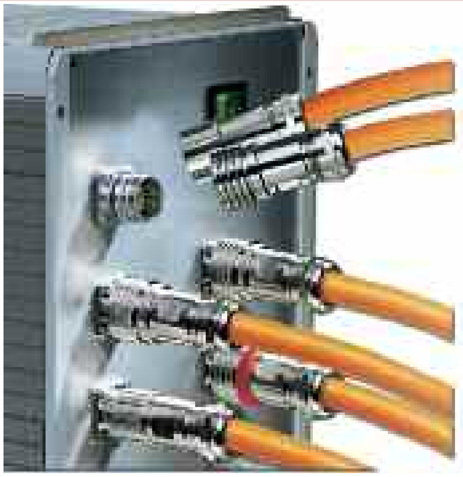


Technical:

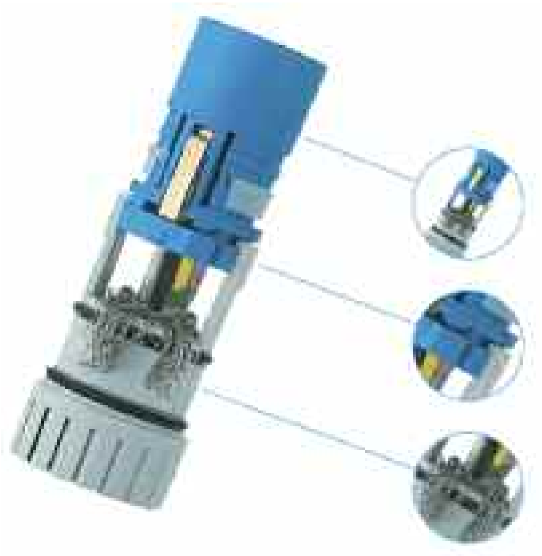
Push-Pull Connectors

IP 67 NEMA 4X

- This unique Connector features a panel mounted Dual Function Connector suitable for Screw and Push-Pull (Quick Disconnect) Connection. The threaded male panel mount has the locking grooves. Initially the connector can be specified with the more economical female screw connector and later converted to the more user friendly Push-Pull style. Easy Connect / Disconnect even under restricted working conditions.



ISO 9001:2000 Certified
CERTIFICATE # 08-511



Cable assembly and shielding is possible in a single operation. Trimming of braided shield is not necessary for insertion into the connector housing.

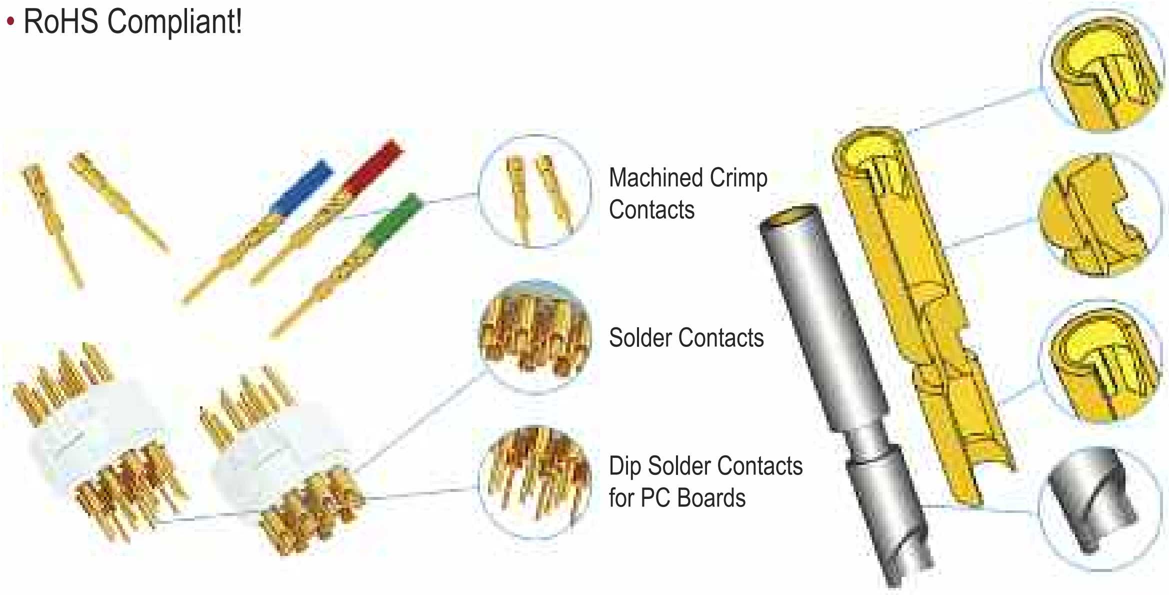
Patented Euro Lock System® holds the contacts securely in position. Strain relief insert with four fingers prevents cable rotation.

Flexible EMI O-ring guarantees reliable EMI protection for light and heavy braided shields.

Unique Benefits

Why use HUMMEL Circular Connectors?

- Easy field assembly - No special tool required to insert & extract contacts.
- Modular for a variety of configurations - All connectors EMI ready.
- Threaded and Push-Pull (Quick Disconnect) in One - Compatible to other M23 brands.
- Reliable connection - Contacts with low plug-in force and high mating cycles.
- Pre-Tinned contacts - Reliable, Faster and Safer means of soldering.
- Inserts for all types of contacts - Crimp, Solder & Dip Solder.
- Immediate Availability!
- RoHS Compliant!



Machined Crimp Contacts

Solder Contacts

Dip Solder Contacts for PC Boards

Radially arranged copper beryllium spring contacts assure low plug-in resistance and high cycle life (mating cycles)

The circular shaped outside configuration of the socket results in a perfect concentric position during connection

Best conductivity as a result of a gold plated contact area.

Reduced assembly time because of tinned soldering surfaces of the contacts.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

TAPERED CAPS & PLUGS

Tapered Caps &
Plugs
T Series
15-1, 15-2, 15-3

Tapered Caps &
Plugs
W Series -
Wide Flange
15-4

Tapered Caps &
Plugs
WWX Series -
Extra-Wide Flanges
15-4

Tapered Caps &
Plugs
WW Series -
Wide, Thick
Flanges
15-5, 15-6

Tapered Caps &
Plugs
TV Series -
Flexible Vinyl
Flanges
15-6

CAPS - NON-THREADED

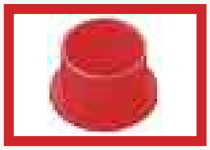
Caps - Non
Threaded
SC Series -
Sleeve Caps for
Tube Ends
15-7, 15-8

Non Threaded
PZC Caps -
Sleeve Caps for
Tube Ends
15-9

Non Threaded
RC Caps -
Caps for Threaded
Connectors
15-9

Non Threaded
RCL Caps -
Caps for
Long-Threaded
Connectors
15-10

Non Threaded
HC Caps -
Hose Caps
15-10

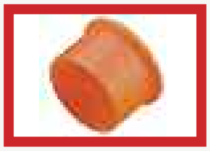


Non Threaded
PN Series -
Push-On
NPT Caps
15-11

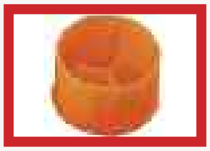
Non Threaded
PM Series -
Push-On
Metric Caps
15-11

Non Threaded
Diesel Fuel
Injector Cap
15-11

Caps - Non Threaded
FTC Series -
Caps for Flareless
Tube and Nut
Assemblies
15-12



Caps - Non
Threaded
EZC Series -
NPT Caps
15-12



Caps - Non Threaded
OF Series -
Caps for Long-
Threaded
Connectors
15-12

Caps - Non
Threaded
J Series -
Tear-Tab Caps
for NPT Pipe
Threads
15-13

Caps - Non
Threaded
JS Series -
Tear-Tab Caps
for Straight Threads
15-13

Caps - Non
Threaded
MJS Series -
Tear-Tab Caps
for Metric Threads
15-14

Caps - Non
Threaded
FCO Series -
Flat-Faced O-Ring
Caps
15-14

Caps - Non
Threaded
TUV Series -
Flexible Tear-Tab
Caps
15-14

Caps - Non
Threaded
MJ Series -
Tear-Tab Caps for
Tapered Metric
Threads
15-15

Caps - Non
Threaded
GC Series -
Grease Caps
15-15

Caps - Non Threaded
PO Series -
Push-On Straight-
Thread Caps
15-15

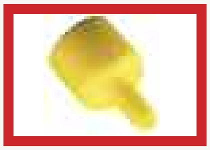
CAPS - VINYL

VFT Series - Textured Vinyl Caps with Flat Ergonomic Pull-Tab
15-16

VC Series - Round Vinyl Caps
15-17, 15-18, 15-19

AN Series - Vinyl Hex Caps
15-20

VFE Series - Vinyl Caps with Flat Ergonomic Pull-Tab
15-20


EZ Series - Flexible Vinyl Caps with Pull-Tab for Easy Removal
15-21

VS Series - Vinyl Squeeze Pull Caps
15-21

VFC Series - Flexible Vinyl Caps with Flat Pull-Tab
15-22

VVC Series - VENT-A-CAP Vinyl Vented Caps
15-23

VCF Series - Vinyl Caps with Flanges
15-24, 15-25

VSC Series - Vinyl Square Caps
15-26

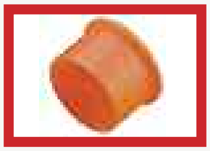
MS Series - Vinyl Hex Caps
15-26

VTC Series - Vinyl Tethered Caps
15-27

CAPS - THREADED

ASC Series - Threaded Aluminum Caps for Threaded Flared Fittings
15-28

DC Series - UN/UNS Caps
15-28


CD Series - Threaded Plastic Caps for Flared JIC Fittings
15-29

PLUGS - NON-THREADED

L Series - Lift-Tab Tapered Plugs
15-30

CPT-NF Series - Center Pull-Tab Tapered Plugs without Flange
15-30

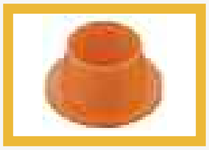
CPT Series - Center Pull-Tab Tapered Plugs
15-31

CT Series - L- and M-Style Tubing Plugs
15-32

OT Series - Type K-Style
15-32

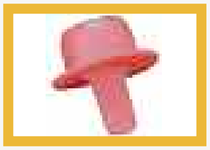
ETV Series - Flexible Vinyl External Thread Plugs
15-33

EZP Series - NPT Plugs
15-33


PZP Series - Unified Plugs
15-34

PTP Series - Tapered Paper Plugs
15-34

K Series - Plugs for Round Tubing
15-35


ECP Series - Ergonomic Center Pull-Tab Plug
15-35

TP Series - Tapered Vinyl Plugs
15-36

PLUGS - NON-THREADED *continued*

Extra-Wide Flange Center Pull Tab
15-36

SPT Series - Plugs for Round Tubing
15-37

VTP Series - Flexible Vinyl Tapered Plugs
15-37

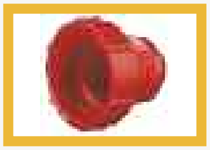
PLUGS - THREADED

P Series - Plastic Threaded Plugs for Pipe Fittings
15-38

PDO Series - Plastic Threaded Plugs for SAE O-Ring Ports
15-39

PDI Series - Threaded Plastic Plugs for Inverted Flared Fittings
15-39

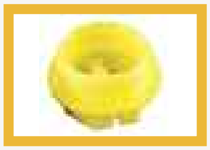
PDE Series - Plastic Threaded Plugs for Flareless Tube
15-39


PD Series - Threaded Plastic Plugs for Flared JIC Fittings
15-40

PDH Series - Plastic Plugs for Flat-Faced O-Ring Hydraulic Fittings
15-40

PDF Series - Plastic Plugs for Flat-Faced O-Ring Hydraulic Fittings
15-41

MT Series - Metric Sealing Plugs
15-41


BT Series - BSP Sealing Plugs
15-42

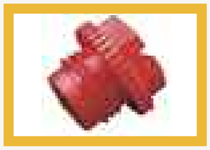
DPN Series - Threaded (UN and UNS) Plugs
15-42

ADP Series - Aluminum Plugs For Flareless Tube and Hose Assemblies
15-43

AFO Series - Aluminum Plugs for Flat-Faced O-Ring Hydraulic Fittings
15-43

ASP Series - Aluminum Plugs for 37° Flared Fittings and Straight-Threaded Ports
15-44

BSP Plastic Threaded Plugs for British Pipe Fittings
15-44


RP Series - Threaded Plugs
15-45

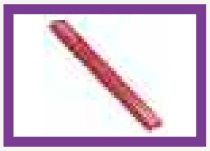
MSP Series - Slotted-Head Plastic Plugs for Metric-Threaded Ports
15-45

PLUGS - FINISHING

COF Series - Caps for Round Tubing and Rods
15-46

FP Series - Finishing Plugs for Square Tubing
15-46

FCR Series - Finishing Caps for Round Tubing
15-47


VRF Series - Vinyl Rectangular Caps & Grips
15-47, 15-48

VHG Series - Vinyl Hanger Grips
15-49

VNG Series - Vinyl Nubbed Grips
15-49

PLUGS - FINISHING *continued*

VHF Series - Vinyl Hanger Tips (Flat)
15-50

VAC Series - Vinyl "U" Metal Fram Caps
15-50

HB Series - Hose-Bend Restrictors
15-51

BP Series - Button Plugs with Recessed-Type Heads
15-52

BPFE Series - Ergonomic Button Plugs with Flush-Type Heads
15-52

BPF Series - Button Plugs with Flush-Type Heads
15-53

PIP Series - Push-In Plugs
15-54

PIP-TAB Series - Push-in Plugs with Pull-Tab
15-54

SQR & SQRV Series Plugs for Square Tubing
15-55

RER & RERV Series Plugs for Rectangular Tubing
15-56

CCF Series - Plugs for Round Tubing
15-57

DOP Series - Dome Plugs
15-58

MASKING

SRC Series - Silicone Rubber Caps
15-59

SFC Series - Silicone Flange Caps
15-60

HJS Series - Flexible Tear-Tab Caps
15-60

HCR Series - High-Temperature Caps
15-60

HVC Series - Flexible Round Caps
15-61, 15-62, 15-63

HEZ Series - Flexible Caps with Pull-Tab
15-64

HFC Series - Flexible Caps with Flat Pull-Tab
15-65

SRP Series - Silicone Rubber Plugs
15-66

SPP Series - Silicone Rubber Pull Plugs
15-66

SWP Series - Silicone Washer Plugs
15-67

VHG Series - Silicone Flangeless Plugs
15-67

HTP Series - Flexible Tapered Plugs
15-68

TUBING AND PACKAGING - TUBE ENDS

PACKAGING Caps
15-69

TE Series - Tube End Plugs
15-69

STP Series - Shallow Tube Plugs
15-70

Tapered Caps & Plugs

T SERIES, TV SERIES, W SERIES, WW SERIES, WWX SERIES

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

T Series Tapered Caps & Plugs

Tapered caps can be used as either caps or plugs. Because they are tapered in design and made from highly pliable (flexible) polyethylene, they not only can be applied to fit snugly but are also readily removable. Especially recommended for use on MIL Std. and SAE-type tube and hydraulic fittings, and for threaded external and internal NPT fittings.

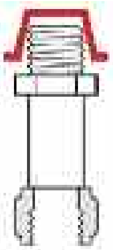
- Several parts are also stocked in green FlexTemp, a flexible thermoplastic rubber for extreme temperature applications ranging from -90°F to 300°F (-68°C to 149°C).

Material: Low-Density Polyethylene **Color*:** Red

Selection Charts - Caps Applicable Specs.: MIL-C-5501/7 (MIL-C-52078), NAS-834

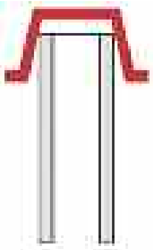
Recommended closures for tube and hydraulic fittings

Caplug No.	Fitting Size (Dash No.)	Tubing Diameter	To Fit Thread Size
T-2	-2	1/8	5/16 – 24
T-3-X	-3	3/16	3/8 – 24
T-4-X	-4	1/4	7/16 – 20
T-5	-5	5/16	1/2 – 20
T-6-X	-6	3/8	9/16 – 18
T-7	-	3/8	5/8 – 18
T-9-X	-8	1/2	3/4 – 16
T-11-X	-10	5/8	7/8 – 14
T-13-X	-12	3/4	1-1/16 – 12
T-15-X	-16	1	1-5/16 – 12
T-18	-20	1-1/4	1-5/8 – 12
T-20	-24	1-1/2	1-7/8 – 12
T-230	-28	1-3/4	2-1/4 – 12
T-250	-32	2	2-1/2 – 12



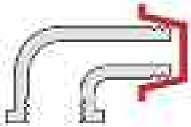
Recommended closures for unthreaded standard weight pipe (Schedule 40)

Caplug No.	Size
T-4	1/8
T-6-X	1/4
T-8-X	3/8
T-11	1/2
T-13-X	3/4
T-16	1
T-18-X	1-1/4
T-210	1-1/2
T-240	2
T-45-A	2-1/2
T-1050	3
T-1064	3-1/2
T-1072	4
T-1107	6
T-1139	8



Recommended closures for threaded external NPT fittings

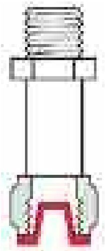
Caplug No.	NPT Size
T-4	1/8
T-6	1/4
T-8-X	3/8
T-11	1/2
T-13-X	3/4
T-15-X	1
T-18	1-1/4
T-20	1-1/2
T-240	2
T-45-A	2-1/2
T-96-A	3
T-502	3-1/2
T-1072	4
T-1086	5
T-1103	6



Selection Charts - Plugs Applicable Specs.: MIL-C-5501/7 (MIL-C-52078), NAS-834

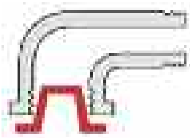
Recommended closures for tube and hydraulic fittings

Caplug No.	Fitting Size (Dash No.)	Tubing Diameter	To Fit Thread Size
T-1	-2	1/8	5/16 – 24
T-2	-3	3/16	3/8 – 24
T-3	-4	1/4	7/16 – 20
T-4	-5	5/16	1/2 – 20
T-5	-6	3/8	9/16 – 18
T-6	-	3/8	5/8 – 18
T-8	-8	1/2	3/4 – 16
T-10	-10	5/8	7/8 – 14
T-12X	-12	3/4	1-1/16 – 12
T-14X	-16	1	1-5/16 – 12
T-17-S	-20	1-1/4	1-5/8 – 12
T-19	-24	1-1/2	1-7/8 – 12
T-221	-28	1-3/4	2-1/4 – 12
T-240	-32	2	2-1/2 – 12



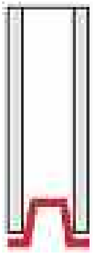
Recommended closures for unthreaded standard weight pipe (Schedule 40)

Caplug No.	NPT Size
T-2X	1/8
T-4	1/4
T-6X	3/8
T-9	1/2
T-12X	3/4
T-14	1
T-17-S	1-1/4
T-20-S	1-1/2
T-24-S	2
T-44	2-1/2
T-501	3
T-502	3-1/2
T-1070	4
T-1086	5
T-1103	6



Recommended closures for threaded external NPT fittings

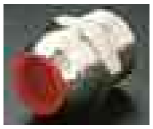
Caplug No.	Size
T-1	1/8
T-2X	1/4
T-5	3/8
T-7	1/2
T-10	3/4
T-13	1
T-16	1-1/4
T-18	1-1/2
T-220	2
T-250	2-1/2
T-53	3
T-1050	3-1/2
T-1064	4
T-1080	5
T-1097	6
T-1128	8



Tapered Caps & Plugs

T SERIES Tapered Caps & Plugs (cont.)

ISO 9001:2000 Certified
CERTIFICATE # 08-511



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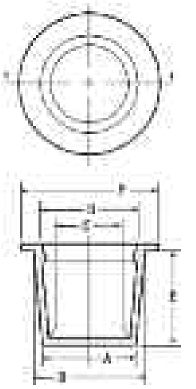
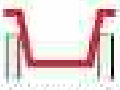
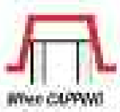




When PLUGGING
"B" Dim. must be at least 1% larger than hole to be plugged. Minimum .020"



When CAPPING
"C" Dim. must be at least 1% smaller than diameter to be capped. Minimum .020"

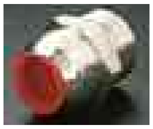
Caplug No.	DIMENSIONS												Packaging	
	A		B		C		D		E		F		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
T-00	.116	2.95	.182	4.62	.053	1.35	.120	3.05	.38	9.65	.31	7.87	5000	1000
T-00-S	.140	3.56	.180	4.57	.088	2.24	.109	2.77	.22	5.59	.31	7.87	5000	1000
T-00-X	.145	3.68	.205	5.21	.079	2.01	.150	3.81	.38	9.65	.41	10.41	5000	1000
T-0	.173	4.39	.240	6.10	.111	2.82	.177	4.50	.38	9.65	.38	9.65	5000	1000
T-0-X	.184	4.67	.255	6.48	.113	2.87	.172	4.37	.38	9.65	.38	9.65	5000	1000
235-V	.209	5.31	.269	6.83	.150	3.81	.210	5.33	.34	8.64	.38	9.65	15000	3000
235-T	.210	5.33	.275	6.99	.146	3.71	.211	5.36	.34	8.64	.45	11.43	10000	2000
T-1	.236	5.99	.302	7.67	.174	4.42	.240	6.10	.38	9.65	.44	11.18	5000	1000
T-1-X	.267	6.78	.335	8.51	.205	5.21	.273	6.93	.38	9.65	.47	11.94	5000	1000
T-2	.299	7.59	.365	9.27	.235	5.97	.302	7.67	.38	9.65	.50	12.70	5000	1000
T-2-S	.325	8.26	.367	9.32	.263	6.68	.305	7.75	.19	4.83	.50	12.70	5000	1000
T-2-X	.330	8.38	.396	10.06	.267	6.78	.333	8.46	.38	9.65	.53	13.46	5000	1000
T-3	.361	9.17	.427	10.85	.298	7.57	.365	9.27	.38	9.65	.56	14.22	5000	1000
T-3-X	.390	9.91	.456	11.58	.327	8.31	.394	10.01	.38	9.65	.59	14.99	5000	1000
T-4	.419	10.64	.485	12.32	.356	9.04	.422	10.72	.38	9.65	.63	16.00	5000	1000
T-4-X	.447	11.35	.513	13.03	.385	9.78	.451	11.46	.38	9.65	.66	16.76	5000	1000
T-5	.471	11.96	.547	13.89	.409	10.39	.485	12.32	.44	11.18	.69	17.53	5000	1000
189-C	.477	12.12	.547	13.89	.415	10.54	.485	12.32	.31	7.87	.69	17.53	7500	1500
T-5-X	.500	12.70	.576	14.63	.440	11.18	.516	13.11	.44	11.18	.72	18.29	5000	1000
T-5-S	.533	13.54	.562	14.28	.477	12.12	.506	12.85	.22	5.59	.68	17.27	5000	1000
T-6	.532	13.51	.608	15.44	.468	11.89	.545	13.84	.44	11.18	.75	19.05	5000	1000
T-6-X	.550	13.97	.631	16.03	.487	12.37	.568	14.43	.47	11.94	.75	19.05	5000	1000
T-6-S	.554	14.07	.612	15.55	.490	12.45	.551	14.00	.31	7.87	.75	19.05	5000	1000
T-7	.580	14.73	.667	16.94	.518	13.16	.605	15.37	.50	12.70	.81	20.57	5000	1000
T-7-X	.610	15.49	.695	17.65	.549	13.95	.634	16.10	.50	12.70	.84	21.34	5000	1000
T-8	.640	16.26	.727	18.47	.578	14.68	.664	16.87	.50	12.70	.88	22.35	5000	1000
T-8-S	.669	16.99	.694	17.63	.613	15.57	.638	16.21	.19	4.83	.75	19.05	5000	1000
T-8-X	.675	17.15	.755	19.18	.613	15.57	.693	17.60	.50	12.70	.88	22.35	5000	1000
T-9	.690	17.53	.788	20.02	.628	15.95	.726	18.44	.56	14.22	.94	23.88	5000	1000
T-9-X	.725	18.42	.823	20.91	.663	16.84	.761	19.33	.56	14.22	.97	24.64	5000	1000
T-9-S	.740	18.80	.765	19.43	.678	17.22	.703	17.86	.19	4.83	.88	22.35	5000	1000
710	.750	19.05	.805	20.45	.688	17.48	.743	18.87	.19	4.83	.86	21.84	7500	1500
T-10	.750	19.05	.848	21.54	.687	17.45	.785	19.94	.56	14.22	1.00	25.40	5000	1000
T-10S	.748	19.00	.848	21.54	.687	17.45	.775	19.69	.39	9.91	1.02	25.91	5000	1000
T-11	.802	20.37	.911	23.14	.740	18.80	.849	21.57	.63	16.00	1.06	26.93	5000	1000
T-11-X	.815	20.70	.930	23.62	.753	19.13	.868	22.05	.63	16.00	1.09	27.69	5000	1000
T-15-A	.836	21.24	1.305	33.15	.777	19.74	1.247	31.68	1.06	26.93	1.43	36.32	2500	500
T-11-S	.837	21.26	.890	22.61	.757	19.23	.810	20.57	.22	5.59	1.05	26.67	5000	1000
192-2-C	.854	21.69	.958	24.33	.790	20.07	.894	22.71	.66	16.76	1.13	28.70	2500	500
T-12	.866	22.00	.975	24.77	.803	20.40	.912	23.17	.63	16.00	1.13	28.70	5000	1000
192-1	.869	22.07	.973	24.71	.805	20.45	.909	23.09	.75	19.05	1.13	28.70	2500	500
T-12-X	.915	23.24	1.040	26.42	.855	21.72	.980	24.89	.69	17.53	1.16	29.47	5000	1000
249-2	.950	24.13	1.090	27.69	.890	22.61	1.030	26.16	1.03	26.16	1.25	31.75	1500	300
277	.955	24.26	1.040	26.42	.895	22.73	.980	24.89	.50	12.70	1.16	29.46	3500	700
T-13-A	.960	24.38	1.047	26.59	.900	22.86	.987	25.07	.50	12.70	1.19	30.23	5000	1000
T-13	.964	24.49	1.090	27.69	.901	22.89	1.027	26.09	.75	19.05	1.25	31.75	2500	500
249-W	.975	24.77	1.104	28.04	.918	23.32	1.047	26.59	.75	19.05	1.44	36.58	2000	400
T-13-X	.995	25.27	1.145	29.08	.933	23.70	1.083	27.51	.75	19.05	1.31	33.28	2500	500
709	1.020	25.91	1.040	26.42	.940	23.88	.960	24.38	.88	22.35	1.31	33.27	1500	300
T-14	1.094	27.79	1.215	30.86	1.031	26.19	1.152	29.26	.75	19.05	1.41	35.82	2500	500
T-16-A	1.140	28.96	1.420	36.07	1.085	27.56	1.358	34.49	.81	20.57	1.56	39.63	2500	500
T-14-X	1.175	29.85	1.284	32.61	1.113	28.27	1.222	31.04	.63	16.00	1.44	36.58	2500	500
250-SW	1.175	29.85	1.284	32.61	1.113	28.27	1.222	31.04	.66	16.76	1.67	42.42	2000	400
250	1.179	29.95	1.286	32.66	1.115	28.32	1.222	31.04	.75	19.05	1.44	36.58	1500	300
T-15	1.224	31.09	1.355	34.42	1.161	29.49	1.292	32.82	.75	19.05	1.50	38.10	2500	500
T-15-X	1.235	31.37	1.360	34.55	1.173	29.80	1.298	32.97	.81	20.57	1.50	38.10	2500	500
T-17-A	1.239	31.47	1.507	38.28	1.169	29.69	1.437	36.50	.75	19.05	1.63	41.40	2500	500
1153	1.276	32.41	1.312	33.32	1.155	29.32	1.190	32.23	.56	14.20	1.38	35.05	2000	400
T-15-S	1.285	32.64	1.346	34.19	1.227	31.17	1.288	32.72	.38	9.65	1.47	37.34	5000	1000
252	1.292	32.82	1.356	34.44	1.231	31.27	1.295	32.89	.75	19.05	1.50	38.10	1500	330
T-16	1.312	33.33	1.465	37.21	1.249	31.73	1.402	35.61	.88	22.35	1.63	41.40	2500	500
253	1.312	33.32	1.465	37.21	1.248	31.70	1.401	35.59	.75	19.05	1.62	41.15	1500	300
253-2	1.344	34.14	1.507	38.28	1.282	32.56	1.445	36.70	.94	23.88	1.77	44.96	1000	200
253-S	1.350	34.29	1.465	37.21	1.286	32.66	1.401	35.59	.53	13.46	1.62	41.15	2000	400
T-16-S	1.395	35.43	1.465	37.21	1.345	34.16	1.405	35.69	.39	9.91	1.59	40.39	1000	200
727	1.435	36.45	1.500	38.10	1.340	34.04	1.420	36.07	.80	20.32	1.75	44.45	1000	200
T-20-A	1.440	36.58	1.895	48.13	1.378	35.00	1.833	46.56	1.28	32.51	2.06	52.33	1000	200
T-17	1.447	36.76	1.600	40.64	1.384	35.15	1.537	39.04	.88	22.35	1.75	44.45	1000	200
254-S	1.447	36.75	1.600	40.64	1.384	35.15	1.537	39.04	.94	23.88	1.75	44.45	1000	200
254	1.451	36.86	1.601	40.67	1.387	35.23	1.537	39.04	.75	19.05	1.75	44.45	1000	200
T-17-S	1.513	38.43	1.600	40.64	1.451	36.86	1.537	39.04	.50	12.70	1.75	44.45	2500	500
194	1.519	38.58	1.602	40.69	1.455	36.96	1.538	39.07	.75	19.05	1.75	44.45	1800	360
T-18	1.560	39.63	1.682	42.72	1.498	38.05	1.620	41.15	.75	19.05	1.88	47.75	1000	200
195-S	1.574	39.98	1.688	42.88	1.514	38.46	1.628	41.35	.62	15.75	1.88	47.75	5000	1000
T-18-X	1.630	41.40	1.750	44.45	1.568	39.83	1.688	42.88	.75	19.05	1.94	49.28	1000	200

Note:
Part numbers shown in **RED** are also available in FlexTemp (thermoplastic rubber) Green.

T Series continues on next page

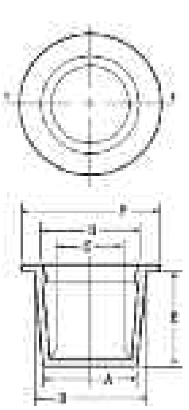
Tapered Caps & Plugs

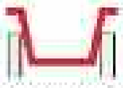
T SERIES Tapered Caps & Plugs (cont.)



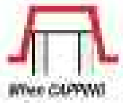
Expanded!

Caplug No.	DIMENSIONS												Packaging	
	A		B		C		D		E		F		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
255	1.633	41.48	1.750	44.45	1.569	39.85	1.690	42.93	.75	19.05	1.84	46.74	1000	200
1972	1.720	43.69	1.850	46.99	1.664	42.27	1.794	45.57	.75	19.05	2.03	51.56	3500	700
T-21-A	1.738	44.15	2.163	54.94	1.668	42.37	2.093	53.16	1.18	29.97	2.31	58.68	1000	200
T-19	1.750	44.45	1.880	47.75	1.688	42.88	1.818	46.18	.75	19.05	2.00	50.80	1000	200
T-20	1.780	45.21	1.950	49.53	1.718	43.64	1.888	47.96	1.00	25.40	2.13	54.10	1000	200
T-20-S	1.781	45.24	1.805	45.85	1.722	43.74	1.746	44.35	.38	9.65	2.00	50.80	1000	200
206	1.807	45.90	1.938	49.23	1.743	44.27	1.874	47.60	1.00	25.40	2.16	54.86	1000	200
T-210	1.844	46.84	2.000	50.80	1.781	45.24	1.938	49.23	1.00	25.40	2.13	54.10	1000	200
911	1.865	47.37	1.975	50.17	1.785	45.34	1.895	48.13	.67	17.02	2.38	60.45	2500	500
T-21	1.900	48.26	2.076	52.73	1.837	46.66	2.013	51.13	1.00	25.40	2.25	57.15	1000	200
T-22-A	1.935	49.15	2.310	58.68	1.875	47.63	2.255	57.28	.85	21.59	2.47	62.74	1000	200
806	1.950	49.53	2.065	52.45	1.885	47.88	2.000	50.80	.75	19.05	2.20	55.88	2500	500
T-220	1.975	50.17	2.132	54.15	1.913	48.59	2.070	52.58	1.00	25.40	2.25	57.15	1000	200
T-22-S	2.015	51.18	2.147	54.54	1.953	49.61	2.085	52.96	.75	19.05	2.31	58.68	1000	200
258-S	2.020	51.31	2.100	53.34	2.060	52.32	2.140	54.36	.38	9.65	2.59	65.79	1000	200
T-221	2.067	52.50	2.243	56.97	2.005	50.93	2.181	55.40	1.00	25.40	2.44	61.98	1000	200
T-25-A	2.125	53.98	2.406	61.11	2.063	52.40	2.344	59.54	1.00	25.40	2.53	64.26	1000	200
T-230	2.136	54.26	2.312	58.73	2.074	52.68	2.250	57.15	1.00	25.40	2.56	65.03	1000	200
T-24-S	2.230	56.64	2.260	57.41	2.168	55.07	2.198	55.83	.50	12.70	2.50	63.50	1000	200
1230	2.280	57.91	2.400	60.96	2.216	56.29	2.336	59.33	.75	19.05	2.80	71.12	1500	300
T-240	2.298	58.37	2.464	62.59	2.235	56.77	2.401	60.99	1.00	25.40	2.63	66.80	500	100
708	2.300	58.42	2.464	62.59	2.220	56.39	2.383	60.53	.75	19.05	2.66	67.56	2000	400
T-33-A	2.307	58.60	2.650	67.31	2.245	57.03	2.588	65.74	1.25	31.75	2.78	70.61	500	100
265	2.311	58.70	2.650	67.31	2.247	57.07	2.586	65.68	1.00	25.40	2.78	70.61	500	100
T-250	2.395	60.84	2.602	66.09	2.333	59.26	2.540	64.52	1.03	26.16	2.81	71.38	500	100
263	2.396	60.86	2.604	66.14	2.332	59.23	2.540	64.52	1.16	29.46	2.81	71.37	500	100
T-43-A	2.457	62.41	2.750	69.85	2.395	60.84	2.688	68.28	1.00	25.40	2.88	73.15	500	100
T-33-A1	2.480	62.99	2.644	67.16	2.418	61.42	2.582	65.59	.63	16.00	2.78	70.61	1000	200
T-43-X	2.555	64.90	2.690	68.33	2.493	63.32	2.628	66.75	.63	16.00	2.88	73.15	1000	200
267	2.561	65.05	2.690	68.33	2.497	63.42	2.626	66.70	.75	19.05	2.88	73.15	500	100
T-44	2.641	67.08	2.790	70.87	2.579	65.51	2.728	69.29	.75	19.05	2.94	74.68	500	100
2156	2.655	67.44	2.788	70.82	2.595	65.91	2.728	69.29	.50	12.70	2.97	75.44	1000	200
862	2.706	68.73	2.870	72.90	2.626	66.70	2.790	70.87	.72	18.29	3.06	77.72	500	100
208	2.720	69.09	2.990	75.95	2.656	67.46	2.926	74.32	1.00	25.40	3.13	79.50	500	100
T-45-A	2.760	70.11	2.990	75.95	2.685	68.20	2.947	74.86	1.00	25.40	3.13	79.51	500	100
T-500	2.849	72.37	2.980	75.69	2.787	70.79	2.918	74.12	.75	19.05	3.25	82.55	500	100
T-53	2.975	75.57	3.103	78.82	2.915	74.04	3.041	77.24	.75	19.05	3.34	84.84	500	100
T-55-A	2.982	75.75	3.245	82.43	2.912	73.97	3.175	80.65	1.00	25.40	3.38	85.86	500	100
228	2.996	76.10	3.159	80.24	2.916	74.07	3.079	78.21	.47	11.94	3.41	86.61	500	100
T-57-A	3.090	78.49	3.370	85.60	3.020	76.71	3.300	83.82	1.00	25.40	3.50	88.90	500	100
T-96-A	3.270	83.06	3.562	90.48	3.200	81.28	3.492	88.70	1.13	28.70	3.69	93.73	250	50
T-501	3.325	84.46	3.457	87.81	3.245	82.43	3.377	85.78	.75	19.05	3.63	92.21	250	50
T-1050	3.470	88.14	3.600	91.44	3.410	86.62	3.540	89.92	.75	19.05	3.88	98.56	500	100
T-1051	3.550	90.17	3.730	94.75	3.480	88.40	3.660	92.97	1.00	25.40	4.00	101.60	250	50
T-1052	3.680	93.48	3.800	96.52	3.610	91.70	3.730	94.75	.75	19.05	4.00	101.60	250	50
T-502	3.790	96.27	3.920	99.57	3.710	94.24	3.840	97.54	.75	19.05	4.12	104.65	250	50
T-1063	3.930	99.83	4.070	103.38	3.860	98.05	4.000	101.60	.75	19.05	4.38	111.26	250	50
T-1064	4.020	102.11	4.140	105.16	3.940	100.08	4.070	103.38	.75	19.05	4.53	115.07	250	50
T-1067	4.090	103.89	4.320	109.73	4.010	101.86	4.240	107.70	1.25	31.75	4.62	117.35	250	50
406	4.214	107.04	4.459	113.26	4.134	105.00	4.379	111.23	1.00	25.40	4.94	125.48	400	80
T-1070	4.270	108.46	4.430	112.53	4.180	106.18	4.340	110.24	.88	22.35	4.88	123.96	250	50
T-1072	4.370	111.00	4.620	117.35	4.290	108.97	4.540	115.32	1.00	25.40	5.00	127.01	250	50
T-1076	4.640	117.86	4.850	123.19	4.570	116.08	4.780	121.42	.88	22.35	5.25	133.36	250	50
T-1078	4.790	121.67	4.970	126.24	4.710	119.64	4.890	124.21	1.00	25.40	5.38	136.66	250	50
T-1079	4.910	124.72	5.090	129.29	4.830	122.69	5.010	127.26	1.00	25.40	5.50	139.71	250	50
407	4.980	126.49	5.100	129.54	4.900	124.46	5.020	127.51	.69	17.53	5.44	138.18	450	90
T-1080	4.990	126.75	5.200	132.09	4.920	124.97	5.100	129.55	1.00	25.40	5.63	143.01	250	50
T-1084	5.180	131.58	5.360	136.15	5.110	129.80	5.290	134.37	1.00	25.40	5.88	149.36	250	50
T-1086	5.330	135.39	5.490	139.45	5.210	132.34	5.370	136.40	.88	22.35	5.88	149.36	250	50
T-1088	5.470	138.94	5.620	142.75	5.390	136.91	5.540	140.72	1.00	25.40	6.13	155.71	250	50
T-1090	5.570	141.48	5.750	146.06	5.490	139.45	5.670	144.02	1.00	25.40	6.19	157.23	250	50
T-1092	5.700	144.79	5.870	149.10	5.610	142.50	5.790	147.07	.98	24.89	6.25	158.76	250	50
T-1097	6.010	152.66	6.180	156.98	5.920	150.37	6.100	154.95	1.00	25.40	6.62	168.15	250	50
T-1100	6.180	156.98	6.350	161.30	6.090	154.69	6.260	159.01	1.00	25.40	6.75	171.46	100	20
T-1103	6.400	162.57	6.560	166.63	6.330	160.79	6.490	164.85	.87	22.10	6.94	176.28	100	20
T-1107	6.610	167.90	6.710	170.44	6.530	165.87	6.630	168.41	1.50	38.10	7.19	182.63	100	20
365	6.668	169.37	6.774	172.06	6.562	166.67	6.668	169.37	1.50	38.10	7.19	182.63	100	20
T-1108S	6.880	174.75	7.030	178.56	6.800	172.72	6.950	176.53	.50	12.70	7.67	194.82	100	20
T-1108X	6.943	176.22	7.358	186.75	6.851	173.88	7.264	184.37	1.46	37.03	7.72	195.94	80	16
T-1109	7.050	179.08	7.120	180.86	6.970	177.04	7.060	179.33	1.00	25.40	7.63	193.81	100	20
T-1110	7.340	186.44	7.650	194.32	7.260	184.41	7.560	192.03	1.00	25.40	7.94	201.68	100	20
T-1120	7.660	194.57	7.840	199.14	7.580	192.54	7.760	197.11	1.00	25.40	8.12	206.26	100	20
T-1128	7.970	202.45	8.140	206.76	7.880	200.16	8.050	204.48	1.00	25.40	8.38	212.86	100	20
T-1133	8.150	207.02	8.350	212.10	8.050	204.48	8.250	209.56	1.38	35.05	8.75	222.26	50	10
T-1137	8.400	213.37	8.600	218.45	8.300	210.83	8.500	215.91	1.38	35.05	9.00	228.61	50	10
T-1139	8.670	220.23	8.730	221.75	8.550	217.18	8.600	218.45	1.50	38.10	9.13	231.91	50	10
T-1142	9.060	230.12	9.364	237.85	8.890	225.81	9.240	234.70	1.75	44.45	9.86	250.44	50	10
390	9.970	253.24	10.220	259.59	9.820	249.43	10.080	256.03	.97	24.64	10.56	268.22	75	15
T-1143	10.790	274.07	11.098	281.89	10.620	269.75	10.910	277.11	1.75	44.45	11.60	294.64	40	8
T-1146	11.110	282.19	11.455	290.96	10.779	273.79	11.366	288.70	2.00	50.80	11.96	303.78	40	8
T-1314	12.790	324.87	13.138	333.71	12.480	316.99	12.923	328.24	2.00	50.80	13.64	346.46	30	6
T-1360	13.250	336.55	13.597	345.36	12.960	329.18	13.177	334.70	2.00	50.80	14.10	358.14	30	6





When PLUGGING
"B" Dim. must be at least 1% larger than hole to be plugged. Minimum .030"



When CAPPING
"C" Dim. must be at least 1% smaller than diameter to be capped. Minimum .020"

Note:
Part numbers shown in RED are also available in FlexTemp (thermoplastic rubber) Green.

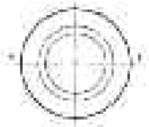
ISO 9001:2000 Certified
CERTIFICATE # 08-511

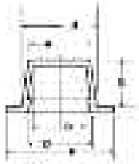
Tapered Caps & Plugs

W SERIES Tapered Caps & Plugs with Wide Flanges

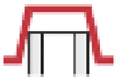
Material: Low-Density Polyethylene
Color*: Red

Featuring a wider flange than standard tapered caps, Series W offers added protection for bearing surfaces and cannot be accidentally pushed all the way into or through an opening being plugged.

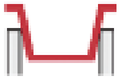




Caplug No.	DIMENSIONS												Packaging	
	A		B		C		D		E		F		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
W-0	.173	4.39	.240	6.10	.111	2.82	.177	4.50	.38	9.65	.56	14.22	5000	1000
W-1	.240	6.10	.315	8.00	.183	4.65	.245	6.22	.36	9.14	.62	15.75	5000	1000
W-2	.302	7.67	.375	9.53	.240	6.10	.303	7.70	.38	9.65	.69	17.53	5000	1000
W-3	.360	9.14	.425	10.80	.298	7.57	.363	9.22	.38	9.65	.75	19.05	5000	1000
W-4	.425	10.80	.480	12.19	.363	9.22	.418	10.62	.38	9.65	.81	20.57	5000	1000
W-5	.472	11.99	.540	13.72	.410	10.41	.478	12.14	.44	11.18	.88	22.35	5000	1000
W-6	.536	13.61	.615	15.62	.474	12.04	.553	14.05	.44	11.18	.94	23.88	5000	1000
W-7	.590	14.99	.670	17.02	.528	13.41	.608	15.44	.50	12.70	1.00	25.40	5000	1000
W-8	.643	16.33	.726	18.44	.581	14.76	.662	16.82	.50	12.70	1.03	26.16	5000	1000
W-9	.683	17.35	.785	19.94	.621	15.77	.723	18.36	.53	13.46	1.13	28.70	5000	1000
W-10	.765	19.43	.865	21.97	.703	17.86	.803	20.40	.56	14.22	1.19	30.23	5000	1000
W-11	.820	20.83	.930	23.62	.758	19.25	.868	22.05	.59	14.99	1.25	31.75	5000	1000
W-12	.872	22.15	.977	24.82	.810	20.57	.916	23.27	.59	14.99	1.31	33.28	2500	500
W-13	.975	24.77	1.104	28.04	.913	23.19	1.042	26.47	.72	18.29	1.44	36.58	2500	500
W-14	1.158	29.41	1.275	32.39	1.096	27.84	1.213	30.81	.72	18.29	1.56	39.63	2500	500
W-14X	1.175	29.85	1.284	32.61	1.120	28.45	1.229	31.22	.63	16.00	1.67	42.42	2500	500
W-15	1.243	31.57	1.375	34.93	1.181	30.00	1.313	33.35	.72	18.29	1.69	42.93	2500	500
W-16	1.312	33.33	1.475	37.47	1.250	31.75	1.413	35.89	.88	22.35	1.81	45.98	1000	200
W-16X	1.517	38.53	1.600	40.64	1.432	36.37	1.514	38.46	.49	12.34	2.26	57.30	2000	400
W-17	1.455	36.96	1.615	41.02	1.393	35.38	1.553	39.45	.72	18.29	1.94	49.28	1000	200
W-18	1.575	40.01	1.685	42.80	1.513	38.43	1.623	41.23	.69	17.53	2.00	50.80	1000	200
W-19	1.735	44.07	1.900	48.26	1.673	42.50	1.838	46.69	.72	18.29	2.22	56.39	1000	200
W-20	1.810	45.98	1.950	49.53	1.748	44.40	1.888	47.96	.69	17.53	2.31	58.68	1000	200
W-21	1.945	49.40	2.100	53.34	1.883	47.83	2.038	51.77	.69	17.53	2.44	61.98	1000	200



When Capping
"C" Dim. must be at least 1% smaller than diameter to be capped. Minimum .020".

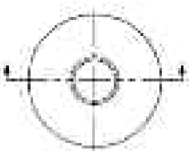


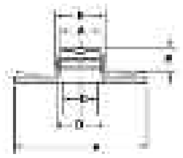
When PLUGGING
"B" Dim. must be at least 1% larger than hole to be plugged. Minimum .020".

WWX SERIES Tapered Caps & Plugs with Extra-Wide, Extra-Thick Flanges

The extra-wide flange of the WWX Series provides extended visibility. This dummy proof design prevents the mating component from being installed without first removing the cap. Available in 13 sizes, this versatile part may easily be used as a cap or plug, depending on application.

Material: Low-Density Polyethylene
Color: Yellow





Caplug No.	DIMENSIONS												Packaging	
	A		B		C		D		E		F		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
WWX-8	.628	15.95	.725	18.42	.566	14.38	.643	16.33	.44	11.18	2.23	56.64	1000	200
WWX-10	.755	19.18	.870	22.10	.686	17.42	.788	20.02	.50	12.70	2.37	60.20	1000	200
WWX-12	.867	22.02	.975	24.77	.798	20.27	.889	22.58	.56	14.22	2.48	62.99	1000	200
WWX-13	.984	24.99	1.105	28.07	.909	23.09	1.014	25.76	.66	16.76	2.61	66.29	1000	200
WWX-14	1.110	28.20	1.253	31.83	1.046	26.57	1.171	29.74	.66	16.76	2.73	69.34	500	100
WWX-15	1.237	31.42	1.382	35.10	1.171	29.74	1.291	32.79	.66	16.76	2.88	73.15	800	160
WWX-16	1.312	33.32	1.465	37.21	1.243	31.57	1.375	34.93	.66	16.76	2.97	75.44	800	160
WWX-17	1.452	36.88	1.603	40.72	1.387	35.23	1.519	38.58	.66	16.76	3.10	78.74	700	140
WWX-18	1.580	40.13	1.714	43.54	1.513	38.43	1.624	41.25	.66	16.76	3.21	81.53	700	140
WWX-21	1.927	48.95	2.058	52.27	1.867	47.42	1.973	50.11	.66	16.76	3.56	90.42	600	120
WWX-230	2.120	53.85	2.290	58.17	2.036	51.71	2.210	56.13	1.00	25.40	3.79	96.27	300	60
WWX-250	2.395	60.83	2.602	66.09	2.322	58.98	2.530	64.26	1.13	28.70	4.10	104.14	200	40
WWX-44	2.638	67.01	2.795	70.99	2.547	64.69	2.670	67.82	1.13	28.70	4.26	108.20	200	40

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Tapered Caps & Plugs

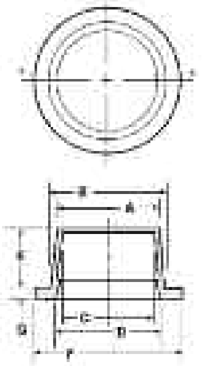
Expanded!

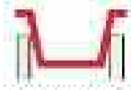
WW SERIES Tapered Caps & Plugs with Wide, Thick Flanges

Caplug No.	DIMENSIONS														Packaging	
	A		B		C		D		E		F		G		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
WW-00	.116	2.95	.182	4.62	.053	1.35	.120	3.05	.37	9.40	.50	12.70	.090	2.29	5000	1000
WW-0	.173	4.39	.240	6.10	.111	2.82	.177	4.50	.37	9.40	.56	14.22	.090	2.29	5000	1000
WW-0X	.230	5.84	.275	6.99	.149	3.78	.190	4.83	.31	7.87	.56	14.22	.060	1.52	10000	2000
WW-1	.236	5.99	.296	7.52	.174	4.42	.225	5.72	.31	7.87	.62	15.75	.090	2.29	5000	1000
WW-2	.299	7.59	.365	9.27	.235	5.97	.302	7.67	.31	7.87	.68	17.27	.090	2.29	5000	1000
WW-2X	.333	8.46	.392	9.96	.269	6.83	.319	8.10	.31	7.87	.72	18.29	.090	2.29	5000	1000
WW-3	.367	9.32	.418	10.62	.298	7.57	.354	8.99	.31	7.87	.75	19.05	.090	2.29	5000	1000
WW-3X	.397	10.08	.447	11.35	.328	8.33	.383	9.73	.31	7.87	.78	19.81	.090	2.29	5000	1000
WW-4	.427	10.85	.475	12.07	.356	9.04	.409	10.39	.31	7.87	.81	20.57	.090	2.29	5000	1000
WF 9	.435	11.05	.509	12.93	.365	9.27	.450	11.43	.47	11.94	.83	21.08	-	-	10000	2000
WF 9-2	.460	11.68	.500	12.70	.396	10.06	.444	11.28	.38	9.65	.75	19.05	-	-	6000	1200
WW-5	.481	12.22	.547	13.89	.409	10.39	.493	12.52	.37	9.40	.87	22.10	.090	2.29	5000	1000
WW-5X	.500	12.70	.563	14.30	.440	11.18	.500	12.70	.37	9.40	.89	22.61	.090	2.29	5000	1000
WW-6	.530	13.46	.615	15.62	.468	11.89	.547	13.89	.37	9.40	.94	23.88	.090	2.29	5000	1000
WF11-2	.560	14.22	.631	16.03	.497	12.62	.579	14.71	.47	11.94	.97	24.64	-	-	6500	1300
WW-7	.590	14.99	.667	16.94	.518	13.16	.605	15.37	.44	11.18	1.00	25.40	.090	2.29	5000	1000
WW-7X	.610	15.49	.687	17.45	.548	13.92	.635	16.13	.44	11.18	1.03	26.16	.090	2.29	5000	1000
WW-8	.628	15.95	.725	18.42	.558	14.17	.662	16.81	.44	11.18	1.06	26.92	.090	2.29	5000	1000
WW-8X	.658	16.71	.750	19.05	.588	14.94	.687	17.45	.44	11.18	1.09	27.69	.090	2.29	5000	1000
WW-9	.690	17.53	.775	19.69	.620	15.75	.721	18.31	.47	11.94	1.12	28.45	.090	2.29	5000	1000
WW-9X	.725	18.42	.812	20.62	.663	16.84	.761	19.33	.50	12.70	1.16	29.46	.090	2.29	5000	1000
WW-10	.755	19.18	.870	22.10	.693	17.60	.808	20.52	.50	12.70	1.18	29.97	.090	2.29	5000	1000
WW-11	.820	20.83	.930	23.62	.755	19.18	.865	21.97	.53	13.46	1.25	31.75	.090	2.29	2500	500
WW-11X	.825	20.96	.929	23.60	.763	19.38	.878	22.30	.56	14.22	1.25	31.75	.090	2.29	2500	500
WF 21	.866	22.00	.976	24.79	.804	20.42	.925	23.50	.65	16.51	1.81	45.97	-	-	2500	500
WW-12	.867	22.02	.975	24.77	.805	20.45	.913	23.19	.56	14.22	1.28	32.51	.090	2.29	2500	500
WW-12X	.915	23.24	1.035	26.29	.840	21.34	.960	24.38	.63	16.00	1.34	34.04	.090	2.29	2500	500
WW-13	.984	24.99	1.105	28.07	.919	23.34	1.040	26.42	.66	16.76	1.44	36.58	.090	2.29	2500	500
WW-13B	1.094	27.79	1.215	30.86	1.031	26.19	1.132	28.75	.69	17.53	1.56	39.62	.090	2.29	2500	500
WW-14	1.110	28.19	1.233	31.32	1.043	26.49	1.157	29.39	.66	16.76	1.56	39.62	.090	2.29	2500	500
WW-14X	1.150	29.21	1.284	32.61	1.108	28.14	1.205	30.61	.66	16.76	1.56	39.62	.090	2.29	2500	500
WF 24-2	1.150	29.21	1.284	32.61	1.080	27.43	1.220	30.99	.75	19.05	1.56	39.62	-	-	1500	300
WF 25	1.180	29.97	1.314	33.38	1.115	28.32	1.260	32.00	.75	19.05	1.56	39.62	-	-	1500	300
WF 26	1.236	31.39	1.382	35.10	1.166	29.62	1.324	33.63	.75	19.05	1.69	42.93	-	-	1500	300
WW-15	1.237	31.42	1.382	35.10	1.167	29.64	1.288	32.72	.66	16.76	1.68	42.67	.090	2.29	2500	500
WW-16	1.312	33.32	1.465	37.21	1.249	31.72	1.364	34.65	.81	20.57	1.84	46.74	.120	3.05	1000	200
WF 27-2	1.312	33.32	1.466	37.24	1.249	31.72	1.427	36.25	.78	19.81	1.84	46.74	-	-	1000	200
WF 27	1.312	33.32	1.465	37.21	1.248	31.70	1.417	35.99	.93	23.62	1.84	46.74	-	-	1000	200
WW-16X	1.416	35.97	1.516	38.51	1.354	34.39	1.462	37.13	.69	17.53	1.75	44.45	.120	3.05	1000	200
WW-17	1.452	36.88	1.603	40.72	1.377	34.98	1.503	38.18	.63	16.00	1.94	49.28	.120	3.05	1000	200
WF-28	1.452	36.88	1.604	40.74	1.378	35.00	1.552	39.42	.75	19.05	1.94	49.28	-	-	1000	200
WW-18	1.580	40.13	1.714	43.54	1.515	38.48	1.649	41.88	.63	16.00	2.06	52.32	.120	3.05	1000	200
WW-19	1.730	43.94	1.887	47.93	1.650	41.91	1.780	45.21	.63	16.00	2.31	58.67	.120	3.05	1000	200
WF 30	1.730	43.94	1.888	47.96	1.650	41.91	1.828	46.43	.75	19.05	2.31	58.67	-	-	500	100
WF 31	1.810	45.97	1.975	50.17	1.731	43.97	1.916	48.67	.75	19.05	2.38	60.45	-	-	500	100
WW-210	1.850	46.99	2.020	51.31	1.788	45.42	1.917	48.69	1.00	25.40	2.44	61.98	.120	3.05	500	100
WF 32	1.850	46.99	2.020	51.31	1.788	45.42	1.973	50.11	1.12	28.45	2.44	61.98	-	-	500	100
1064	1.900	48.26	1.990	50.55	1.780	45.21	1.870	47.50	.57	14.48	2.34	59.44	-	-	2500	500
WW-21	1.927	48.95	2.058	52.27	1.857	47.17	1.988	50.50	.63	16.00	2.38	60.45	.120	3.05	1000	200
WF 34	2.067	52.50	2.243	56.97	2.005	50.93	2.197	55.80	1.12	28.45	2.69	68.33	-	-	250	50
WF 34-2	2.072	52.63	2.263	57.48	2.010	51.05	2.218	56.34	1.12	28.45	2.69	68.33	-	-	250	50
WW-221	2.079	52.81	2.228	56.59	2.015	51.18	2.132	54.15	.99	25.15	2.63	66.80	.120	3.05	500	100
WW-25A	2.125	53.98	2.406	61.11	2.063	52.40	2.344	59.54	1.00	25.40	2.69	68.33	.120	3.05	500	100
WF 35	2.136	54.25	2.312	58.72	2.074	52.68	2.265	57.53	1.12	28.45	2.75	69.85	-	-	250	50
WW-240	2.298	58.37	2.464	62.59	2.235	56.77	2.370	60.20	1.00	25.40	2.88	73.15	.120	3.05	500	100
WF 36	2.298	58.37	2.464	62.59	2.235	56.77	2.416	61.37	1.12	28.45	2.88	73.15	-	-	250	50
WW-33A	2.305	58.55	2.620	66.55	2.245	57.02	2.560	65.02	1.25	31.75	3.06	77.72	.120	3.05	250	50
WF-38	2.305	58.55	2.620	66.55	2.245	57.02	2.583	65.61	1.00	25.40	3.06	77.72	-	-	300	60
WW-250	2.395	60.83	2.602	66.09	2.333	59.26	2.500	63.50	1.13	28.70	3.00	76.20	.120	3.05	500	100
WF-37	2.395	60.83	2.602	66.09	2.333	59.26	2.556	64.92	1.25	31.75	3.00	76.20	-	-	250	50
WW-43A	2.475	62.87	2.725	69.22	2.405	61.09	2.650	67.31	.91	23.11	3.16	80.26	.120	3.05	250	50
WF 39	2.475	62.87	2.725	69.22	2.405	61.09	2.677	68.00	1.37	34.80	3.16	80.26	-	-	250	50
WW-44	2.638	67.01	2.759	70.08	2.568	65.23	2.661	67.59	.69	17.53	3.22	81.79	.120	3.05	500	100
WF-40	2.638	67.01	2.759	70.08	2.568	65.23	2.704	68.68	.81	20.57	3.21	81.53	-	-	250	50
WF 41	2.685	68.20	2.955	75.06	2.623	66.62	2.917	74.09	1.12	28.45	3.44	87.38	-	-	250	50
WW-55A	2.990	75.95	3.250	82.55	2.920	74.17	3.150	80.01	1.00	25.40	3.75	95.25	.120	3.05	250	50
WF-43	2.990	75.95	3.250	82.55	2.920	74.17	3.202	81.33	1.12	28.45	3.75	95.25	-	-	250	50
WW-53	2.995	76.07	3.150	80.01	2.925	74.30	3.080	78.23	.75	19.05	3.59	91.19	.120	3.05	250	50
WW-57A	3.090	78.49	3.370	85.60	3.020	76.71	3.322	84.38	1.00	25.40	3.81	96.77	.120	3.05	250	50

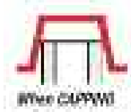
Material: Low-Density Polyethylene
Color*: Yellow
Applicable Spec:
NAS 816

Accepted by the aircraft industry, Series WW Caps are designed with a wide, thick flange to ensure against being erroneously forced "all the way through" when used as a plug. Available in 76 sizes, this versatile part may easily be used as a cap or plug, depending upon application.





When PLUGGING
"B" Dim. must be at least 1% larger than hole to be plugged. Minimum .030"



When CAPPING
"C" Dim. must be at least 1% smaller than diameter to be capped. Minimum .020"

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Tapered Caps & Plugs

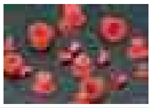
Expanded!

WW SERIES Tapered Caps & Plugs with Wide, Thick Flanges (cont.)

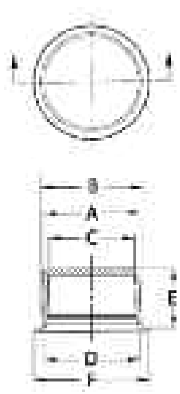
Caplug No.	DIMENSIONS														Packaging	
	A		B		C		D		E		F		G		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
WW-96A	3.225	81.92	3.562	90.47	3.155	80.14	3.517	89.33	1.12	28.45	4.00	101.60	.120	3.05	250	50
WF 45	3.324	84.43	3.458	87.83	3.244	82.40	3.398	86.31	.87	22.10	3.88	98.55	-	-	200	40
WF 45-2	3.347	85.01	3.486	88.54	3.265	82.93	3.418	86.82	.87	22.10	3.91	99.31	-	-	200	40
WW-502	3.790	96.27	3.920	99.57	3.710	94.23	3.840	97.54	.75	19.05	4.34	110.24	.120	3.05	250	50
WW-1064	4.011	101.88	4.135	105.03	3.937	100.00	4.061	103.15	.75	19.05	4.62	117.35	.120	3.05	100	20
WW-1076	4.640	117.86	4.815	122.30	4.570	116.08	4.685	119.00	.88	22.35	5.17	131.32	.120	3.05	100	20
WW-1107	6.611	167.92	6.683	169.75	6.530	165.86	6.630	168.40	1.43	36.32	7.12	180.85	.120	3.05	100	20

TV SERIES Flexible Vinyl Tapered Caps & Plugs

The TV Series feature an injection-molded vinyl tapered design that can be used as a cap or a plug. Using an A-80 Shore durometer (hardness) vinyl, these caps resist tearing, cracking, splitting and shredding. Highly flexible, they enable snug fits even with smaller dimensions and irregular shapes; they are also easy to remove.



Material: Low-Density Polyethylene
Color*: Red



Caplug No.	DIMENSIONS												Packaging	
	A		B		C		D		E		F		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
TV-1	.234	5.94	.270	6.86	.180	4.57	.198	5.03	.319	8.10	.39	9.91	10000	1000
TV-2	.300	7.62	.363	9.22	.218	5.54	.295	7.49	.345	8.76	.50	12.70	7000	1000
TV-3	.348	8.84	.386	9.80	.260	6.60	.304	7.72	.339	8.61	.50	12.70	7500	1000
TV-4	.381	9.68	.436	11.07	.304	7.72	.374	9.50	.350	8.89	.56	14.22	10000	1000
TV-4A	.404	10.26	.463	11.76	.338	8.59	.392	9.96	.409	10.39	.59	14.99	10000	1000
TV-4B	.468	11.89	.505	12.83	.396	10.06	.434	11.02	.469	11.91	.61	15.49	7000	1000
TV-5	.433	11.00	.498	12.65	.365	9.27	.441	11.20	.405	10.29	.67	17.02	7500	1000
TV-6	.496	12.60	.556	14.12	.434	11.02	.494	12.55	.425	10.80	.72	18.29	6000	1000
TV-6A	.570	14.48	.619	15.72	.497	12.62	.546	13.87	.467	11.86	.81	20.57	1700	340
TV-7	.577	14.66	.636	16.15	.506	12.85	.570	14.48	.495	12.57	.79	20.07	6000	1000
TV-248	.628	15.95	.775	19.69	.570	14.48	.697	17.70	.710	18.03	.90	22.86	3750	750
TV-8†	.686	17.42	.754	19.15	.624	15.85	.680	17.27	.588	14.94	.96	24.38	4500	900
TV-8P	.670	17.02	.735	18.67	.592	15.04	.671	17.04	.464	11.79	.98	24.89	6000	1000
TV-8J	.737	18.72	.771	19.58	.653	16.59	.711	18.06	.485	12.32	.99	25.15	6000	1000
TV-9†	.760	19.30	.818	20.78	.620	15.75	.678	17.22	.630	16.00	.96	24.38	3500	700
TV-10†	.813	20.65	.884	22.45	.745	18.92	.837	21.26	.498	12.65	1.20	30.48	3500	700
TV-11	.842	21.39	.895	22.73	.772	19.61	.850	21.59	.608	15.44	1.07	27.18	6000	1000
TV-11A	.935	23.75	.980	24.89	.775	19.69	.820	20.83	.570	14.48	1.24	31.50	4000	800
TV-11P	.847	21.51	.931	23.65	.764	19.41	.851	21.62	.641	16.28	1.08	27.43	4000	800
TV-12	.993	25.22	1.106	28.09	.925	23.50	1.044	26.52	.745	18.92	1.37	34.80	2500	500
TV-12P	.880	22.35	.950	24.13	.720	18.29	.790	20.07	.650	16.51	1.16	29.46	4000	800
TV-13†	1.031	26.19	1.164	29.57	.950	24.13	1.090	27.69	.760	19.30	1.30	33.02	2250	450
TV-14	1.121	28.47	1.183	30.05	1.040	26.42	1.128	28.65	.745	18.92	1.46	37.08	2000	400
TV-14A†	1.182	30.02	1.303	33.10	1.042	26.47	1.163	29.54	.760	19.30	1.51	38.35	2500	500
TV-15	1.346	34.19	1.425	36.20	1.196	30.38	1.275	32.39	.880	22.35	1.63	41.40	1200	240
TV-16	1.301	33.05	1.367	34.72	1.221	31.01	1.291	32.79	.710	18.03	1.58	40.13	1500	300
TV-16A	1.324	33.63	1.460	37.08	1.184	30.07	1.320	33.53	.940	23.88	1.68	42.67	1500	300
TV-19	1.512	38.40	1.586	40.28	1.362	34.59	1.436	36.47	.750	19.05	1.87	47.50	1500	300
TV-19A	1.773	45.03	1.871	47.52	1.667	42.34	1.774	45.06	.625	15.88	2.10	53.34	1200	240
TV-20	1.625	41.28	1.703	43.26	1.514	38.46	1.615	41.02	.700	17.78	1.85	46.99	1500	300
TV-20A	1.833	46.56	1.947	49.45	1.760	44.70	1.852	47.04	1.000	25.40	2.17	55.12	1500	300
TV-21H	1.906	48.41	2.054	52.17	1.790	45.47	1.923	48.84	1.050	26.67	2.47	62.74	850	170

† Part has a side pull-tab on flange

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Non-Threaded

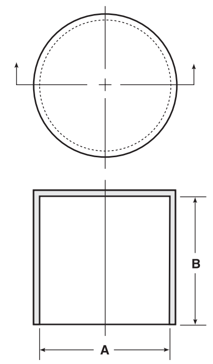
SC SERIES Sleeve Caps for Tube Ends

Expanded!

Caplug No.	DIMENSIONS				Packaging	
	A – Press Fit on O.D.		B		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.		
SC-5/64**	.078	1.98	.50	12.70	5000	1000
SC-3/32	.094	2.38	.59	14.99	5000	1000
SC-1/8	.125	3.18	.59	14.99	5000	1000
211-L	.125	3.18	.75	19.05	25000	5000
SC-5/32	.156	3.97	.56	14.22	5000	1000
212-S	.172	4.37	.62	15.75	10000	2000
SC-3/16-5	.188	4.76	.35	8.89	5000	1000
213-S	.188	4.78	.47	11.94	25000	5000
SC-3/16-10	.188	4.76	.59	14.99	5000	1000
SC-3/16-16	.188	4.76	1.00	25.40	5000	1000
213-R	.203	5.16	.62	15.75	15000	3000
SC-7/32	.219	5.56	.75	19.05	5000	1000
SC-1/4-4	.250	6.35	.22	5.59	5000	1000
SC-1/4-7	.250	6.35	.44	11.18	5000	1000
214-S	.250	6.35	.50	12.70	15000	3000
SC-1/4-14	.250	6.35	.88	22.35	5000	1000
SC-1/4-16	.250	6.35	1.00	25.40	5000	1000
274-G	.266	6.76	.75	19.05	10000	2000
SC-9/32	.281	7.14	.75	19.05	5000	1000
1805	.313	7.92	.38	9.65	18000	3600
SC-5/16	.313	7.94	.88	22.35	5000	1000
216-T	.375	9.53	.46	11.68	20000	4000
155†	.375	9.53	.75	19.05	10000	2000
SC-3/8	.375	9.53	.88	22.35	5000	1000
216-L	.375	9.53	1.12	28.45	7500	1500
1030	.422	10.72	1.25	31.75	5000	1000
773	.438	11.11	.22	5.59	15000	3000
SC-7/16-8	.438	11.11	.50	12.70	5000	1000
159	.438	11.11	.62	15.75	10000	2000
SC-7/16-14	.438	11.11	.88	22.35	5000	1000
217-L	.438	11.11	1.50	38.10	5000	1000
SC-7/16-16	.438	11.11	1.00	25.40	5000	1000
157†	.469	11.90	.75	19.05	7500	1500
161†	.500	12.70	.44	11.18	15000	3000
SC-1/2-8	.500	12.70	.50	12.70	5000	1000
SC-1/2-14	.500	12.70	.88	22.35	5000	1000
SC-1/2-24	.500	12.70	1.50	38.10	2500	500
176†	.563	14.27	.42	10.67	10000	2000
SC-9/16-9	.563	14.29	.56	14.22	5000	1000
219-S	.563	14.27	.62	15.75	7500	1500
SC-9/16-14	.563	14.29	.88	22.35	5000	1000
1868	.625	15.87	.64	16.26	6500	1300
SC-5/8	.625	15.88	.88	22.35	5000	1000
981††	.625	15.88	.88	22.35	5000	1000
220-H	.625	15.88	.94	23.88	5000	1000
220-U	.625	15.88	1.50	38.10	2000	400
1834	.625	15.88	2.50	63.50	1000	200
221-S	.688	17.48	.75	19.05	5000	1000
SC-11/16	.688	17.46	.88	22.35	5000	1000
222-S	.750	19.05	.38	9.65	7500	1500
SC-3/4	.750	19.05	.88	22.35	5000	1000
SC-3/4-16	.742	18.85	1.00	25.40	5000	1000
222-H	.750	19.05	.94	23.88	2500	500
222-L	.750	19.05	2.47	62.74	4000	800
SC-25/32	.781	19.84	1.00	25.40	5000	1000
835	.813	20.65	.69	17.53	3500	700
SC-13/16	.813	20.64	.88	22.35	5000	1000
201-T	.875	22.23	.62	15.75	2500	500
201-S	.875	22.23	.62	15.75	3500	700
SC-7/8	.875	22.23	.88	22.35	5000	1000
201-M	.875	22.23	1.75	44.45	1000	200
748	.906	23.00	.75	19.05	2500	500
1202	.906	23.83	.88	22.35	2500	500
SC-15/16	.938	23.81	1.00	25.40	2500	500
1784	1.000	25.40	.50	12.70	3500	700

Material: Low-Density Polyethylene
Color*: Yellow
Applicable Specs:
MIL-C-52078,
MIL-C-5501/9,
NAS 844

Series SC Sleeve Caps are designed to fit outside diameters of tubing sizes listed with a snug friction grip. Available in over 128 different outside diameters and lengths, the SC Series is ideal for capping and protecting both threaded and non-threaded tubing or rod ends. They also make excellent masks for painting, plating or grit-blasting operations.



** Material for this part is Polyolefin Elastomer.

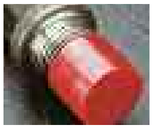
† Parts have external ribs.

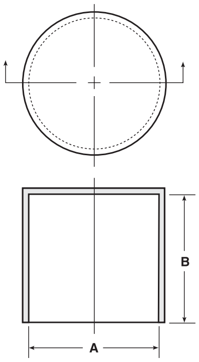
†† Parts have internal ribs.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Non-Threaded

SC SERIES Sleeve Caps for Tube Ends (cont.)





Caplug No.	DIMENSIONS				Packaging	
	A – Press Fit on O.D.		B		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.		
2003	1.000	25.40	.50	12.70	3500	700
1364	1.000	25.40	.62	15.75	2000	400
138	1.000	25.40	.75	19.05	2500	500
SC-1	1.000	25.40	1.00	25.40	2500	500
138-L	1.000	25.40	1.75	44.45	1000	200
SC-1-1/16	1.063	26.99	1.00	25.40	2500	500
224	1.125	28.58	.88	22.35	1500	300
SC-1-1/8	1.125	28.58	1.00	25.40	2500	500
SC-1-1/8-21	1.125	28.58	1.31	33.27	2000	400
SC-1-3/16	1.188	30.16	1.00	25.40	2500	500
289-S	1.250	31.75	.50	12.70	2000	400
1831	1.250	31.75	.87	22.10	1000	200
SC-1-1/4	1.250	31.75	1.00	25.40	2000	400
289-M	1.250	31.75	1.50	38.10	700	140
289-L	1.250	31.75	1.75	44.45	500	100
SC-1-5/16-12	1.313	33.34	.75	19.05	3000	600
SC-1-5/16	1.313	33.34	1.00	25.40	1000	200
760	1.375	35.00	.62	15.75	1000	200
SC-1-3/8	1.375	34.92	1.00	25.40	1000	200
428	1.375	35.00	1.50	38.10	500	100
428-2	1.375	35.00	1.59	40.39	500	100
SC-1 1/2	1.500	38.10	1.00	25.40	1000	200
290-L	1.500	38.10	1.75	44.45	500	100
1975	1.500	38.10	.87	22.10	1000	200
SC-1-5/8	1.625	41.28	1.00	25.40	1000	200
291-L	1.625	41.28	1.25	31.75	500	100
291-2	1.719	43.65	1.00	25.40	500	100
1008	1.750	44.45	.88	22.35	500	100
SC-1-3/4	1.750	44.45	1.00	25.40	1000	200
291-3	1.844	46.84	1.21	30.73	500	100
SC-1-7/8	1.875	47.63	1.00	25.40	1000	200
SC-1-29/32	1.906	48.41	1.00	25.40	1000	200
SC-2	2.000	50.80	.88	22.35	1000	200
226	2.000	50.80	1.00	25.40	1000	200
226-L	2.000	50.80	1.53	38.86	250	50
1025	2.125	53.98	.50	12.70	1000	200
SC-2-1/8	2.125	53.98	1.00	25.40	500	100
SC-2-1/4	2.250	57.15	.88	22.35	500	100
1365	2.250	57.15	1.00	25.40	300	60
SC-2-3/8	2.375	60.33	.88	22.35	500	100
SC-2-1/2	2.500	63.50	.88	22.35	500	100
SC-2-9/16	2.563	65.10	1.00	25.40	500	100
372	2.609	66.27	1.00	25.40	1000	200
SC-2-5/8	2.625	66.68	1.00	25.40	500	100
SC-2-3/4	2.750	69.85	1.00	25.40	500	100
SC-3	3.000	76.20	1.00	25.40	450	90
SC-3-1/8	3.125	79.38	1.38	35.05	250	50
1528	3.250	82.55	1.00	25.40	800	160
SC-3-5/16	3.313	84.14	1.00	25.40	400	100
1563	3.438	87.31	1.00	25.40	700	140
1521	3.500	88.90	1.00	25.40	600	120
SC-3-1/2	3.500	88.90	1.38	35.05	250	50
2215	3.531	89.69	2.00	50.80	300	60
SC-3-5/8	3.625	92.08	1.38	35.05	250	50
SC-3-3/4	3.750	95.25	1.38	35.05	200	40
SC-4	4.000	101.60	1.38	35.05	250	50
1540	4.000	101.60	1.13	28.70	500	100
SC-4-1/8	4.125	104.78	1.50	38.10	120	24
1400	4.813	122.25	.64	16.26	500	100
1363	4.875	123.83	.92	23.37	350	70
SC-5-1/8	5.125	130.18	1.63	41.40	100	20
SC-5-1/4	5.250	133.36	1.80	45.72	50	n/a
324-3	8.000	203.20	2.30	58.42	40	8

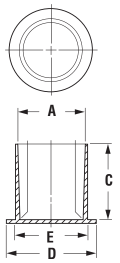
Caps - Non-Threaded

PZC CAPS Sleeve Caps for Tube Ends

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caplug No.	DIMENSIONS									Packaging	
	To Cap Thread Size	A		C		D		E		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
PZC 1	3/8	.360	9.14	.66	16.76	.53	13.49	.42	10.67	10000	2000
PZC 3†	7/16	.430	10.92	.56	14.22	.62	15.88	.49	12.45	10000	2000
PZC 912	9/16	.551	14.00	.83	21.08	.75	19.05	.61	15.52	5000	1000
PZC 5-1	5/8	.605	15.37	.47	11.94	.81	20.65	.66	16.89	7500	1500
PZC 5†	5/8	.605	15.37	.75	19.05	.81	20.65	.66	16.89	5000	1000
PZC 6	11/16	.627	15.93	.47	11.94	.94	23.88	–	–	5000	1000
PZC 71	–	.785	19.94	.58	14.73	1.00	25.40	.86	21.97	4000	800
PZC 7A†	–	.780	19.81	.72	18.29	1.00	25.40	.84	21.34	3500	700
PZC 8A	13/16	.795	20.19	.63	16.00	1.05	26.59	.85	21.72	2500	500
PZC 9	–	.780	19.81	.92	23.37	1.12	28.58	.84	21.34	2500	500
PZC 10†	7/8	.845	21.46	.83	21.08	1.14	28.98	.90	22.99	2000	400

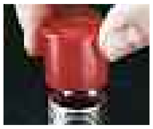
†Has four external vertical ribs.



Material: Low-Density Polyethylene
Color: Orange

Designed to protect unified threads, but can be used on both threaded and non-threaded fittings as well. The flanged top allows for quick and easy removal. This versatile design can be a cap or plug.

Expanded!

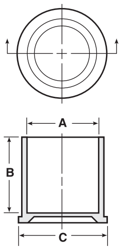


RC CAPS Caps for Threaded Connectors

Caplug No.	DIMENSIONS							Packaging	
	To Cap Thread Size	A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
FT-2211†	5/16	.31	8.00	.84	21.34	.51	12.95	10000	2000
RC-6	3/8	.37	9.50	.47	11.94	.60	15.24	5000	1000
FT-2210†	3/8	.37	9.58	.84	21.34	.58	14.73	7500	1500
RC-7	7/16	.42	10.74	.59	14.99	.57	14.48	5000	1000
RC-M12	12mm	.47	11.99	.47	11.94	.70	17.78	5000	1000
RC-8	1/2	.49	12.67	.55	13.97	.73	18.54	5000	1000
FT-2097	M14	.53	13.59	.81	20.57	.69	17.53	5000	1000
RC-9	9/16	.56	14.25	.48	12.19	.79	20.07	5000	1000
RC-10	5/8	.61	15.49	.84	21.34	.76	19.30	5000	1000
FT-220	5/8	.61	15.52	.88	22.35	.75	19.05	5000	1000
RC-11	11/16	.66	16.97	.84	21.34	.83	21.08	5000	1000
RC-11-7	11/16	.67	17.12	.47	11.94	.92	23.37	5000	1000
RC-11A	-	.67	17.22	.88	22.35	.84	21.34	4500	900
RC-M18	18mm	.69	17.75	1.00	25.40	.93	23.62	3000	600
RC-12	3/4	.73	18.67	.88	22.35	.90	22.86	5000	1000
RC-12-10	3/4	.73	18.75	.65	16.51	.98	24.89	5000	1000
RC-13	13/16	.81	20.60	.56	14.22	1.04	26.42	5000	1000
RC-14	7/8	.86	21.84	.84	21.34	1.02	25.91	5000	1000
RC-14-12	7/8	.86	21.84	.75	19.05	1.11	28.19	4000	800
FT-201	7/8	.86	22.00	.88	22.35	1.03	26.16	2500	500
RC-16	1	.99	25.35	.65	16.51	1.23	31.24	3000	600
RC-17	1-1/16	1.04	26.59	.89	22.61	1.21	30.73	2500	500
FT-448-1	1-1/16	1.04	26.62	1.12	28.45	1.22	30.99	1000	200
RC-19	1-3/16	1.18	30.12	.77	19.56	1.42	36.07	2000	400
RC-21	1-5/16	1.31	33.30	.90	22.86	1.54	39.12	1000	200
RC-21-11	1-5/16	1.31	33.32	.66	16.76	1.53	38.86	2500	500
RC-23	1-7/16	1.43	36.47	.70	17.78	1.67	42.42	1000	200
RC-26	1-5/8	1.63	41.45	.95	24.13	1.86	47.24	1000	200
RC-27	1-11/16	1.68	42.82	.70	17.78	1.92	48.77	1000	200
RC-30	1-7/8	1.88	47.83	1.08	27.43	2.12	53.85	800	160
RC-40	2-1/2	2.50	63.70	1.30	33.02	2.75	69.85	400	80
RC-56	3-1/2	3.50	88.90	1.34	34.04	4.09	103.89	250	50

Material: Low-Density Polyethylene
Color*: Red

Originated for the automotive and air conditioning industries, Series RC Caps are suitable for a multitude of applications. They can be installed to fit threaded or smooth cylindrical surfaces.

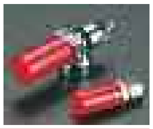


Caps - Non-Threaded

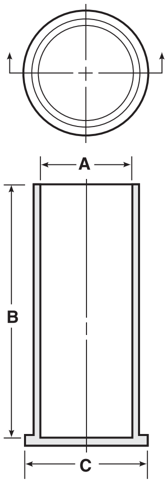
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Expanded!

RCL CAPS Caps for Long-Threaded Connectors



Material: Low-Density Polyethylene
Color*: Red



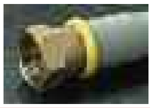
Caplug No.	DIMENSIONS							Packaging	
	To Cap Thread Size	A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
(B-203-2) RCL-2	5/16	.308	7.82	1.24	31.50	.46	11.68	5000	1000
RCL-3	3/8	.370	9.40	1.24	31.50	.52	13.21	5000	1000
RCL-4	7/16	.429	10.90	1.33	33.78	.58	14.73	5000	1000
RCL-5	1/2	.490	12.45	1.33	33.78	.64	16.26	5000	1000
(B-203-6) RCL-6	9/16	.552	14.02	1.41	35.82	.70	17.78	5000	1000
(B-203-8) RCL-8	3/4	.739	18.77	1.56	39.63	.88	22.35	2500	500
RCL-8L	3/4	.739	18.77	2.66	67.56	.88	22.35	2000	400
RCL-9	M-20(.787)	.791	20.09	1.56	39.63	.91	23.11	2500	500
RCL-9L	-	.791	21.08	2.66	67.56	1.01	25.65	1000	200
RCL-10	7/8	.861	21.87	1.70	43.18	1.01	25.66	2500	500
RCL-10L	7/8	.861	21.87	2.66	67.56	1.01	25.66	1500	300
RCL-11	.995	.995	25.27	1.80	45.72	1.15	29.21	1500	300
RCL-12	1-1/16	1.049	26.64	1.89	48.01	1.19	30.23	1000	200
RCL-12L	1-1/16	1.049	26.64	3.00	76.20	1.19	30.23	900	180
RCL-14	1-1/8	1.135	28.83	2.12	53.85	1.25	31.75	1500	300
RCL-14-50†	1-1/8	1.131	28.73	3.10	78.74	1.44	36.58	900	180
RCL-16	1-5/16	1.299	32.99	1.89	48.01	1.44	36.58	1000	200
RCL-18	-	1.459	37.06	2.24	56.90	1.61	40.89	500	100
RCL-20	1-5/8	1.611	40.92	1.92	48.77	1.76	44.71	500	100
FL-160	1-7/8	1.861	47.24	1.94	49.28	2.01	51.05	300	60

†RCL-14-50 is HDPE material.

Series RCL Caps are ideal for protecting threaded or smooth cylindrical surfaces. Originally designed for use on hydraulic double-threaded bulkhead fittings, they are especially suitable where greater longitudinal protection is required. (Formerly the B-203 series.)

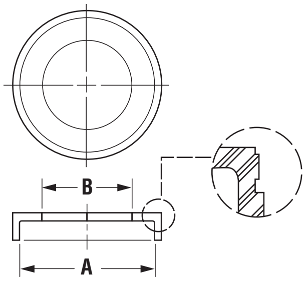
HC SERIES Hose Caps

Series HC Hose Caps are used to cover rigid tube and hose ends, as well as to prevent slippage over the fitting. The primary application for these caps is hose assembly manufacturing.



Caplug No.	DIMENSIONS				Packaging	
	A		B		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.		
HC-4	.320	8.13	.589	14.96	10000	1000
HC-6	.445	11.30	.766	19.46	10000	1000
HC-7†	.660	16.76	.820	20.83	5000	1000
HC-8	.570	14.49	.880	22.35	5000	1000
HC-10	.700	17.78	1.056	26.82	5000	1000
HC-12	.823	20.90	1.183	30.05	5000	1000
HC-16	1.088	27.64	1.404	35.66	5000	1000

†HC-7 is LDPE material.



Material: FlexTemp
(Thermoplastic Rubber)
Color*: Yellow

Caps - Non-Threaded

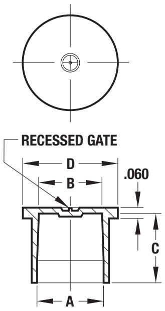
PN SERIES Push-On NPT Caps

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caplug No.	DIMENSIONS									Packaging	
	To Cap NPT Size	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
PN 2	1/8	.399	10.13	.383	9.73	.38	9.65	.66	16.76	15000	3000
PN 4	1/4	.533	13.54	.508	12.90	.53	13.46	.81	20.57	9000	1800
PN 6	3/8	.669	16.99	.644	16.36	.53	13.46	.94	23.88	5000	1000
PN 8	1/2	.833	21.16	.800	20.32	.72	18.29	1.09	27.69	2500	500
PN 12	3/4	1.045	26.54	1.011	25.68	.75	19.05	1.31	33.27	3500	700
PN 16	1	1.310	33.27	1.267	32.18	.93	23.62	1.56	39.62	1000	200
PN 20	1-1/4	1.655	42.04	1.611	40.92	.97	24.64	1.94	49.28	800	160
PN 24	1-1/2	1.893	48.08	1.848	46.94	.97	24.64	2.16	54.86	2000	400
PN 32	2	2.370	60.20	2.323	59.00	1.03	26.16	2.62	66.55	600	120

Engineered to protect NPT fittings, but versatile enough to be used on a variety of threaded and non-threaded fittings. Unlike tear-tab closures, these durable caps can be reused. A flanged top ensures quick and easy removal.

Material: Low-Density Polyethylene
Color: Red Tint
(Natural also available)

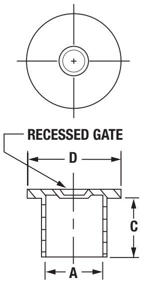


PM SERIES Push-On Metric Caps

Caplug No.	DIMENSIONS							Packaging	
	To Cap Metric Thread Size	A		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
PM 10	M10	.384	9.75	.323	8.20	.689	17.50	7000	1400
PM 12	M12	.463	11.75	.470	11.95	.768	19.50	7000	1400
PM 14	M14	.540	13.72	.470	11.95	.846	21.50	6000	1200
PM 16	M16	.617	15.67	.470	11.95	.925	23.50	5000	1000
PM 18	M18	.696	17.68	.470	11.95	1.004	25.50	5000	1000
PM 20	M20	.774	19.66	.553	14.05	1.083	27.50	3000	600
PM 22	M22	.855	21.72	.553	14.05	1.161	29.50	3000	600
PO100	M27	1.051	26.70	.750	19.05	1.310	33.27	2250	450
PO110	M30	1.175	29.85	.750	19.05	1.440	36.58	2000	400
PM 33	M33	1.285	32.65	.689	17.50	1.594	40.50	1000	200
PM 38	M38	1.481	37.62	.689	17.50	1.791	44.50	1000	200
PM 42	M42	1.641	41.68	.689	17.50	1.949	49.50	1000	200
PO160	M48	1.861	47.27	.970	24.64	2.120	53.85	1000	200

These easy-to-use push-on caps are designed to protect metric fittings. Intended to be reused, this durable cap has a flange for ease of installation and removal. While this cap was developed for metric fittings, its versatile design enables it to be used on a wide variety of threaded and non-threaded fittings.

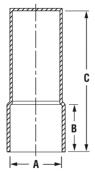
Material: Low-Density Polyethylene
Color: Yellow Tint
(Natural shown is also available)

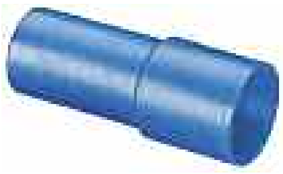


Diesel Fuel Injector Cap

Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
945	1.310	33.27	1.38	35.05	3.45	87.63	1200	240

Protect expensive diesel fuel injectors for just pennies. These plastic caps protect against impact damage, moisture and contaminants during transit. One size fits all standard injectors.



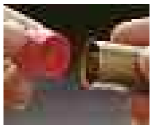


Material: Low-Density Polyethylene
Color: Blue

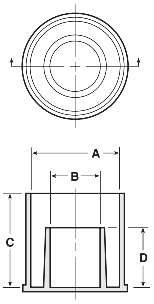
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Non-Threaded

FTC SERIES Caps for Flareless Tube and Nut Assemblies



Material: Low-Density Polyethylene
Color*: Red

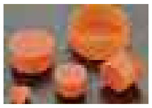


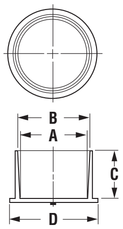
Caplug No.	DIMENSIONS									Packaging	
	To Fit Tube Size	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
FTC-2	1/8	.39	9.91	.17	4.32	.58	14.73	.40	10.16	5000	1000
FTC-3	3/16	.46	11.68	.24	6.10	.63	16.00	.41	10.41	5000	1000
FTC-4	1/4	.59	14.99	.30	7.62	.77	19.56	.52	13.21	5000	1000
FTC-5	5/16	.65	16.51	.37	9.40	.81	20.57	.53	13.46	5000	1000
FTC-6	3/8	.72	18.29	.41	10.41	.81	20.57	.54	13.72	5000	1000
FTC-8	1/2	.91	23.11	.57	14.48	.86	21.84	.54	13.72	2500	500
FTC-10	5/8	1.04	26.42	.67	17.02	.99	25.15	.64	16.26	2500	500
FTC-12	3/4	1.30	33.02	.83	21.08	1.00	25.40	.64	16.26	1000	200
FTC-16	1	1.56	39.63	1.07	27.18	1.10	27.94	.63	16.00	1000	200
FTC-20	1-1/4	2.08	52.83	1.32	33.53	1.10	27.94	.62	15.75	1000	200
FTC-24	1-1/2	2.36	59.95	1.56	39.63	1.08	27.43	.62	15.75	500	100
FTC-28	1-3/4	2.76	70.11	1.83	46.48	1.14	28.96	.69	17.53	500	100
FTC-32	2	3.00	76.20	2.06	52.33	1.17	29.72	.63	16.00	250	50

Featuring a “cap within a cap” design, Series FTC closures can be easily applied to flareless hydraulic tube and nut assemblies. As the FTC Cap is pushed on the nut, the “outer cap” conforms to the hex shape of the nut, while the “inner cap” covers the tube and sleeve inside the nut to hold the assembly firmly in place. This series was formerly known as the FC Series.

EZC SERIES Non-Threaded NPT Caps

Designed to cap NPT fittings, but can be used to protect a variety of items. A heavy-duty, tapered, multi-use cap with a flange for easy insertion and removal.



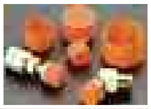


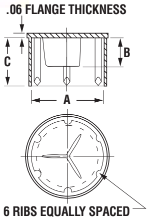
Caplug No.	DIMENSIONS									Packaging	
	To Cap Thread Size	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
EZC 2	1/8	.363	9.22	.385	9.78	.37	9.30	.59	15.09	7500	1500
EZC 4	1/4	.493	12.52	.523	13.28	.42	10.64	.73	18.64	4000	800
EZC 6	3/8	.585	14.86	.662	16.81	.62	15.88	.89	22.63	5000	1000
EZC 8	1/2	.725	18.42	.856	21.74	.59	14.86	1.06	27.00	2500	500
EZC 12	3/4	.990	25.15	1.040	26.42	.69	17.53	1.25	31.75	1500	300
EZC 16	1	1.257	31.93	1.305	33.15	.69	17.48	1.52	38.51	1000	200
EZC 24	1-1/2	1.842	46.79	1.898	48.21	.75	19.13	2.11	53.57	500	100
EZC 26	–	1.962	49.83	1.972	50.09	1.29	32.64	2.25	57.15	250	50

Material: Low-Density Polyethylene **Color:** Orange

OF SERIES Caps for Long-Threaded Connectors

Six internal ribs create a positive grip on the outer surface of the fittings nut. Three internal webs act as a positive stop and positioning feature, preventing movement which could lead to contamination and damage to the fitting during installation.



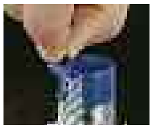


Caplug No.	DIMENSIONS								Packaging	
	To Cap Thread Size	Fitting Size	A		B		C		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.		
OF 4	9/16	-4	.675	17.15	.32	8.13	.49	12.45	3500	700
OF 6	11/16	-6	.790	20.07	.37	9.40	.57	14.48	2500	500
OF 8	13/16	-8	.916	23.27	.43	10.92	.73	18.54	3000	600
OF 10	1	-10	1.108	28.14	.53	13.46	.83	21.08	2000	400
OF 12	1-13/16	-12	1.360	34.54	.57	14.48	.93	23.62	1000	200
OF 16S	1-7/16	-16	1.580	40.89	.58	14.73	1.00	25.40	900	180
OF 16	1-7/16	-16	1.610	40.13	.58	14.73	1.00	25.40	900	180
OF 20	1-11/16	-20	1.860	47.24	.58	14.73	1.00	25.40	700	140
OF 24	2	-24	2.230	56.64	.58	14.73	1.00	25.40	450	90

Material: Low-Density Polyethylene **Color:** Orange

Caps - Non-Threaded

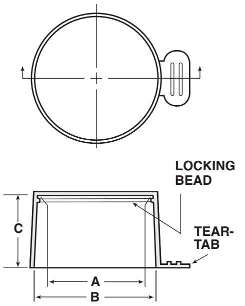
Expanded!



J SERIES Tear-Tab Caps for NPT Pipe Threads

Caplug No.	DIMENSIONS							Packaging	
	To Fit Thread Size	A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
TT-0	M10	–	–	.300	76.20	.32	8.13	20000	4000
J-1/8	M12	.385	9.78	.405	10.29	.32	8.13	5000	1000
J-1/4	M14	.512	13.00	.540	13.72	.49	12.45	5000	1000
J-3/8	M16	.643	16.33	.675	17.15	.49	12.45	5000	1000
TT-4	M18	–	–	.835	21.20	.64	16.26	3500	700
J-3/4	M20	1.005	25.53	1.050	26.67	.65	16.51	2500	500
J-1	M22	1.261	32.03	1.315	33.40	.81	20.57	2500	500
J-1-1/4	M27	1.604	40.74	1.660	42.16	.84	21.34	2000	400
J-1-1/2	M30	1.841	40.76	1.900	48.26	.85	21.59	1000	200
J-2	M33	2.313	58.75	2.375	60.33	.89	22.61	500	100
J-2-1/2	M38	2.792	70.92	2.875	73.03	1.33	33.78	500	100
J-3	M42	3.411	86.64	3.500	88.90	1.39	35.31	250	50
J-4	M48	4.397	111.64	4.522	114.81	2.00	50.80	500	100

Material: Low-Density Polyethylene
Color*: Blue



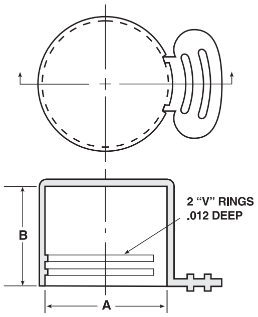
Time-saving Series J Tear-Tab Caps slip easily over male NPT fittings and snap in place. Locking bead engages lead thread and holds cap on securely. The extra-wide tear-tab with gripping ribs breaks the seal for easy removal.

Expanded!

JS SERIES Tear-Tab Caps for Straight Threads

Caplug No.	DIMENSIONS						Packaging	
	To Fit Thread Size in.	To Fit Thread in.	A		B		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.		
JS-6	3/16	3/8–24	.371	9.42	.44	11.18	5000	1000
JS-7	1/4	7/16–20	.428	10.87	.44	11.18	5000	1000
JS-8	5/16	1/2–20	.495	12.57	.46	11.68	5000	1000
JS-9	3/8	9/16–18	.559	14.20	.48	12.19	5000	1000
JS-10	3/8	5/8–18	.615	15.62	.48	12.19	5000	1000
JS-11	3/8	11/16–16	.680	17.27	.48	12.19	5000	1000
JS-12	1/2	3/4–16	.740	18.80	.56	14.22	5000	1000
JS-13	1/2	13/16–12	.803	20.40	.64	16.26	5000	1000
TU 9	---	13/16	.803	20.40	.56	14.22	2500	500
JS-14	5/8	7/8–14	.865	21.97	.70	17.78	5000	1000
TU 10	---	7/8	.865	21.97	.65	16.51	2500	500
JS-16	5/8	1-14	.993	25.22	.65	16.51	5000	1000
JS-17	3/4	1-1/16–12	1.053	26.75	.83	21.08	2500	500
TU 12	---	1-1/16	1.053	26.75	.75	19.05	2500	500
JS-19	7/8	1-3/16–12	1.180	29.97	.75	19.05	2500	500
TU 16	---	1-5/16	1.303	33.10	.75	19.05	1500	300
JS-23	1	1-7/16–12	1.430	36.32	.75	19.05	2000	400
TU 20	---	1-5/8	1.616	41.05	.82	20.83	750	150
TU 21	---	1-11/16	1.678	42.62	.82	20.83	500	100
TU 24	---	1-7/8	1.866	47.40	.95	24.13	500	100
TU 32	---	2-1/2	2.491	63.27	1.10	27.94	350	70

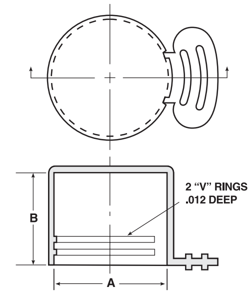
Material: Low-Density Polyethylene
Color*: Natural
(Black in standard carton only)



Series JS Tear-Tab Caps for straight threads feature an extra-wide tab with gripping ribs on both top and bottom, making it easy to grab and tear off. Standard color for the JS is Natural.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Material: Low-Density Polyethylene
Color*: Gold



Caps - Non-Threaded

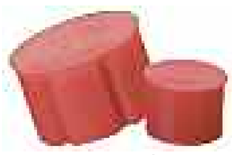
MJS SERIES Tear-Tab Caps for Metric Threads

Caplug No.	DIMENSIONS						Packaging	
	To Fit Tube Size	To Fit Thread Size mm.	A		B		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.		
MJS-18	3/8	M-18	.713	18.11	.56	14.2	5000	1000
MJS-20	1/2	M-20	.791	20.09	.56	14.2	5000	1000
MJS-22	5/8	M-22	.870	22.09	.48	12.2	5000	1000
MJS-27	3/4	M-27	1.067	27.10	.67	17.2	2500	500

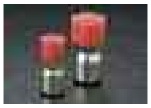
Series MJS Tear-Tab Caps for straight threads feature an extra-wide tab with gripping ribs on both top and bottom, making it easy to grab and tear off. Series MJS fits metric threads. Standard color for the MJS is translucent gold, making it possible to view an O-ring on the fitting.

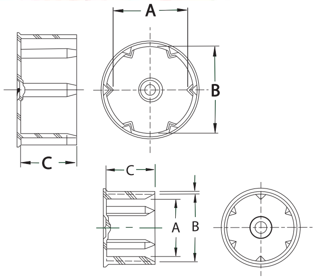
ISO 9001:2000 Certified
CERTIFICATE # 08-511

FCO SERIES Flat-Faced O-Ring Caps



Series FCO Flat-Faced O-Ring Caps are designed to cap the outside of hexnuts. Featuring a chamfered flange for easy hand removal, these caps fit snugly to minimize the chance of falling off during transit. Available in two styles, Series FCO is ideal for fluid power valves and hose and pipe fittings.



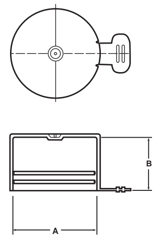


Caplug No.	DIMENSIONS								Packaging	
	To Cap Thread Size	To Fit Hex Size	A		B		C		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.		
FCO-40	9/16–18	11/16	.671	17.04	.786	19.96	.590	14.99	6000	1000
FCO-60	11/16–16	13/16	.792	20.12	.928	23.57	.680	17.27	4000	800
FCO-80	13/16–16	15/16	.916	23.27	1.074	27.28	.840	21.34	2500	500
FCO-100	1–14	1-1/8	1.098	27.89	1.287	32.69	.940	23.88	1500	300
FCO-120	1-3/16–12	1-3/8	1.355	34.42	1.576	40.03	1.030	26.16	1000	200
FCO-160	1-7/16–12	1-5/8	1.586	40.28	1.859	47.22	1.110	28.19	900	180
FCO-200	1-11/16–12	1-7/8	1.832	46.53	2.148	54.56	1.110	28.19	700	140

Material: Low-Density Polyethylene **Color:** Red

TUV SERIES Flexible Tear-Tab Caps

Unlike traditional tear-tab caps, the TUV Series is made of injection-molded vinyl offering a soft, snug fit. The flexible nature of this cap allows it to fit a variety of application sizes. The extra-wide tear-tab has gripping ribs, making it easy to grab and tear off.

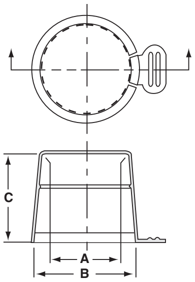


Caplug No.	DIMENSIONS						Packaging	
	To Cap Thread Size	Fitting Size	A		B		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.		
TUV-3	3/8	3	.367	9.32	.44	11.18	7500	1500
TUV-4	7/16	4	.428	10.87	.46	11.68	5000	1000
TUV-5	1/2	5	.492	12.50	.46	11.68	5000	1000
TUV-6	9/16	6	.554	14.07	.48	12.19	3500	700
TUV-6X	5/8	n/a	.616	15.65	.48	12.19	3500	700
TUV-7	11/16	7	.678	17.22	.48	12.19	2500	500
TUV-8	3/4	8	.741	18.82	.56	14.22	4000	800
TUV-9	13/16	9	.803	20.40	.56	14.22	2500	500
TUV-10	7/8	10	.865	21.97	.65	16.51	2500	500
TUV-11	1	11	.990	25.15	.65	16.51	3000	600
TUV-12	1-1/16	12	1.053	26.75	.75	19.05	2500	500
TUV-13	1-3/16	13	1.178	29.92	.75	19.05	2000	400
TUV-M12	12mm	n/a	.473	12.01	.51	12.95	5000	1000

Material: Vinyl **Color:** Red

Caps - Non-Threaded

MJ SERIES Tear-Tab Caps for Tapered Metric Threads

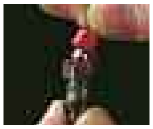


Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
MJ-3/4	1.106	28.09	1.296	32.92	1.14	28.96	2500	500
MJ-1	1.289	32.74	1.500	38.10	1.20	30.48	1500	300

Material: Low-Density Polyethylene **Color*:** Red

Series MJ Tear-Tab Caps slip easily over metric threads and snap in place. Locking bead engages lead thread and holds cap on securely. Tear-tab breaks the seal for easy removal.

GC SERIES Grease Caps

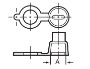


Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
GC-5	.234	5.94	.47	11.94	–	–	2500	500
GC-18	.227	5.77	1.52	38.61	–	–	2500	500
GC-522	.250	6.35	.25	6.35	.24	6.10	2500	500

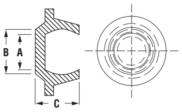
Material: Low-Density Polyethylene **Color*:** Red, Blue, Yellow, Green, Black, White

Series GC Grease Caps snap securely over fittings to seal out dirt and moisture. Integral retaining ring keeps cap in place during servicing. Color coding may be used to indicate type and/or frequency of lubrication. Caps also make good masks for spray painting. Available in two styles.

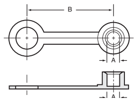
GC-5



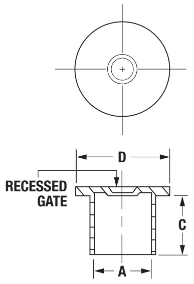
GC-522



GC-18



PO SERIES Push-On Straight-Thread Caps



Caplug No.	DIMENSIONS							Packaging	
	To Fit Thread Size	A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
PO 20	7/16	.428	10.87	.47	11.94	.69	17.53	10000	2000
PO 30	1/2	.490	12.45	.47	11.94	.75	19.05	7000	1400
PO 40	9/16	.550	13.97	.50	12.70	.81	20.57	7500	1500
PO 50	11/16	.676	17.17	.50	12.70	.94	23.88	5000	1000
PO 55	–	.721	19.84	.67	17.02	1.00	25.40	3500	700
PO 60	3/4	.738	20.04	.67	17.02	1.00	25.40	3500	700
PO 70	13/16	.802	20.37	.56	14.22	1.06	26.92	3500	700
PO 80	7/8	.864	21.95	.66	16.76	1.12	28.45	2500	500
PO 90	1	.990	25.15	.66	16.76	1.25	31.75	3000	600
PO 100	1-1/16	1.051	26.70	.75	19.05	1.31	33.27	2250	450
PO 110	1-3/16	1.175	29.85	.75	19.05	1.44	36.58	2000	400
PO 120	1-5/16	1.298	32.97	.75	19.05	1.56	39.62	1500	300
PO 130	1-7/16	1.426	36.22	.75	19.05	1.69	42.93	1000	200
PO 140	1-5/8	1.612	40.94	.85	21.59	1.88	47.75	1000	200
PO 150	1-11/16	1.674	42.52	.85	21.59	1.94	49.28	800	160
PO 160	1-7/8	1.861	47.27	.97	24.64	2.12	53.85	1000	200
PO 170	2	1.985	50.42	1.09	27.69	2.25	57.15	800	160
PO 180	2-1/2	2.481	63.02	1.22	30.99	2.75	69.85	500	100

Material: Low-Density Polyethylene **Color:** Natural

Unlike tear-tab closures that can only be used once, the PO Series is designed to be reused. Specifically designed to protect straight threads with or without O-rings, this unique design is also ideal for use on a variety of thread forms and non-threaded fittings.

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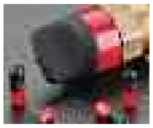
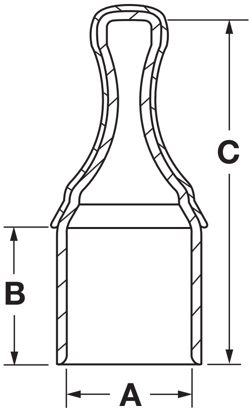
Caps - Vinyl

VFT SERIES Textured Vinyl Caps with Flat Ergonomic Pull-Tab





Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VFT 187-12	.187	4.75	.750	19.05	1.228	31.19	10000	2000
VFT 218-12	.218	5.54	.750	19.05	1.254	31.85	5000	1000
VFT 240-12	.240	6.10	.750	19.05	1.270	32.26	5000	1000
VFT 250-12	.250	6.35	.750	19.05	1.278	32.46	5000	1000
VFT-312-8	.312	7.92	.500	12.70	1.245	31.62	5000	1000
VFT-320-10	.320	8.13	.625	15.88	1.325	33.66	8000	1000
VFT 365-12	.365	9.27	.750	19.05	1.625	41.28	4000	800
VFT-375-8	.375	9.53	.500	12.70	1.425	36.20	5000	1000
VFT 386-12	.386	9.80	.750	19.05	1.625	41.28	3000	600
VFT-406-8	.406	10.31	.500	12.70	1.150	29.21	4000	800
VFT-420-10	.420	10.67	.625	15.88	1.365	34.67	5000	1000
VFT 427-12	.427	10.85	.750	19.05	1.625	41.28	3000	600
VFT-437-8	.437	11.10	.500	12.70	1.255	31.88	5000	1000
VFT-450-6	.450	11.43	.375	9.53	1.275	32.39	8000	1000
VFT 460-12	.460	11.68	.750	19.05	1.625	41.28	3000	600
VFT-470-8	.470	11.94	.500	12.70	1.280	32.51	3000	600
VFT 490-12	.490	12.45	.750	19.05	1.625	41.28	2500	500
VFT-500-8	.500	12.70	.500	12.70	1.425	36.20	5000	1000
VFT 521-12	.521	13.23	.750	19.05	1.750	44.45	2000	400
VFT-530-10	.530	13.46	.625	15.88	1.125	28.58	4000	800
VFT 552-12	.552	14.02	.750	19.05	1.750	44.45	2000	400
VFT 562-12	.562	14.27	.750	19.05	1.813	46.05	2000	400
VFT-595-10	.595	15.11	.625	15.88	1.525	38.74	2500	500
VFT 615-12	.615	15.62	.750	19.05	1.813	46.05	1000	200
VFT 625-12	.625	15.88	.750	19.05	1.813	46.05	1500	300
VFT 656-12	.656	16.66	.750	19.05	1.813	46.05	1500	300
VFT 677-12	.677	17.20	.750	19.05	1.813	46.05	1500	300
VFT 687-12	.687	17.45	.750	19.05	1.813	46.05	1500	300
VFT 695-12	.695	17.65	.750	19.05	1.813	46.05	1500	300
VFT 703-12	.703	17.86	.750	19.05	1.813	46.05	1000	200
VFT-717-16	.717	18.21	1.000	25.40	2.130	54.10	1000	200
VFT 735-12	.735	18.67	.750	19.05	1.813	46.05	1000	200
VFT 740-12	.740	18.80	.750	19.05	1.813	46.05	1000	200
VFT-750-12	.750	19.05	.750	19.05	1.635	41.53	3000	600
VFT 797-12	.797	20.24	.750	19.05	1.813	46.05	1000	200
VFT 812-12	.812	20.62	.750	19.05	1.938	49.23	1000	200
VFT 835-12	.835	21.21	.750	19.05	1.938	49.23	1000	200
VFT 843-12	.843	21.41	.750	19.05	1.938	49.23	1000	200
VFT 865-12	.865	21.97	.750	19.05	1.938	49.23	1000	200
VFT 875-12	.875	22.23	.750	19.05	1.938	49.23	1000	200
VFT 950-14	.950	24.13	.875	22.23	2.140	54.36	750	150
VFT 990-12	.990	25.15	.750	19.05	2.062	52.37	900	180
VFT-1000-10	1.000	25.40	.625	15.88	1.600	40.64	2500	500
VFT 1048-12	1.048	26.62	.750	19.05	2.125	53.98	750	150
VFT 1062-12	1.062	26.97	.750	19.05	2.125	53.98	700	140
VFT-1125-12	1.125	28.58	.750	19.05	1.775	45.09	2000	400
VFT 1240-12	1.240	31.50	.750	19.05	2.125	53.98	600	120
VFT 1250-12	1.250	31.75	.750	19.05	2.125	53.98	600	120
VFT 1500-12	1.500	38.10	.750	19.05	2.125	53.98	500	100
VFT 1625-12	1.625	41.28	.750	19.05	2.125	53.98	400	80

Material: Vinyl **Standard Color:** Red with black texture
Optional Colors*: White, Brown, Orange, Green, Gray, Blue, Yellow, Black with black texture
Textured second coat is only available in black.

The ergonomically designed VFT caps feature a long flat pull-tab for quick removal. To offer an even greater degree of control, we've dipped our standard vinyl part in a second vinyl material that offers a textured finish. This second coat of vinyl grips to hands or gloves 80% better than traditional pull tabs.

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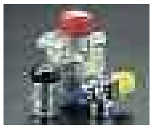
Caps - Vinyl

VC SERIES Round Vinyl Caps

Expanded!



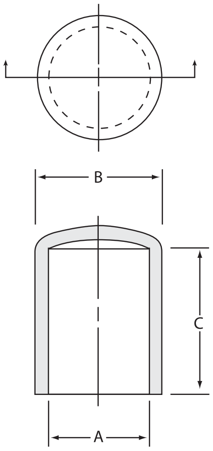
Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
VC-054-10	.054	1.37	.09	2.29	.625	15.88	5000	1000	n/a
VC-062-10	.062	1.57	.12	3.05	.625	15.88	5000	1000	100
VC-072-10	.072	1.83	.13	3.35	.625	15.88	5000	1000	n/a
VC-080-10	.080	2.03	.14	3.56	.625	15.88	5000	1000	100
VC-093-12	.093	2.36	.15	3.81	.750	19.05	5000	1000	100
VC-109-12	.109	2.77	.18	4.57	.750	19.05	5000	1000	100
VC-125-8	.125	3.18	.20	5.08	.500	12.70	5000	1000	n/a
VC-125-16	.125	3.18	.20	5.08	1.000	25.40	5000	1000	100
VC-140-8	.140	3.56	.21	5.33	.500	12.70	5000	1000	n/a
VC-140-16	.140	3.56	.21	5.33	1.000	25.40	5000	1000	100
VC-148-8	.148	3.76	.24	6.30	.500	12.70	5000	1000	n/a
VC-148-16	.148	3.76	.24	6.30	1.000	25.40	5000	1000	n/a
VC-156-8	.156	3.96	.24	6.10	.500	12.70	5000	1000	n/a
VC-156-16	.156	3.96	.24	6.10	1.000	25.40	5000	1000	100
VC-161-8	.161	4.09	.24	6.12	.500	12.70	5000	1000	n/a
VC-161-16	.161	4.09	.24	6.12	1.000	25.39	5000	1000	n/a
VC-172-8	.172	4.37	.25	6.35	.500	12.70	5000	1000	n/a
VC-172-16	.172	4.37	.25	6.35	1.000	25.40	5000	1000	100
VC-180-8	.180	4.57	.26	6.60	.500	12.70	5000	1000	n/a
VC-180-16	.180	4.57	.26	6.60	1.000	25.40	5000	1000	n/a
VC-187-8	.187	4.75	.27	6.86	.500	12.70	5000	1000	n/a
VC-187-16	.187	4.75	.27	6.86	1.000	25.40	5000	1000	100
VC-187-24	.187	4.75	.27	6.86	1.500	38.10	4000	800	n/a
VC-203-8	.203	5.16	.29	7.37	.500	12.70	5000	1000	n/a
VC-203-16	.203	5.16	.29	7.37	1.000	25.40	5000	1000	100
VC-218-8	.218	5.54	.31	7.87	.500	12.70	5000	1000	n/a
VC-218-16	.218	5.54	.31	7.87	1.000	25.40	5000	1000	100
VC-224-8	.224	5.69	.31	7.87	.500	12.70	5000	1000	n/a
VC-224-16	.224	5.69	.31	7.87	1.000	25.40	5000	1000	n/a
VC-234-8	.234	5.94	.32	8.13	.500	12.70	5000	1000	n/a
VC-234-16	.234	5.94	.32	8.13	1.000	25.40	5000	1000	100
VC-240-8	.240	6.09	.33	8.38	.500	12.69	5000	1000	n/a
VC-240-16	.240	6.09	.33	8.38	1.000	25.38	5000	1000	n/a
VC-250-8	.250	6.35	.35	8.89	.500	12.70	5000	1000	n/a
VC-250-16	.250	6.35	.35	8.89	1.000	25.40	5000	1000	100
VC-270-10	.270	6.86	.37	9.39	.625	15.87	5000	1000	n/a
VC-281-8	.281	7.14	.38	9.65	.500	12.70	5000	1000	n/a
VC-281-16	.281	7.14	.38	9.65	1.000	25.40	5000	1000	100
VC-290-8	.290	7.37	.40	10.16	.500	12.70	5000	1000	n/a
VC-290-16	.290	7.37	.40	10.16	1.000	25.40	5000	1000	n/a
VC-304-8	.304	7.72	.41	10.41	.500	12.70	5000	1000	n/a
VC-304-16	.304	7.72	.41	10.41	1.000	25.40	4000	800	n/a
VC-312-8	.312	7.93	.42	10.67	.500	12.70	5000	1000	n/a
VC-312-16	.312	7.93	.42	10.67	1.000	25.40	5000	1000	100
VC-312-24	.312	7.93	.43	10.92	1.500	38.10	2500	500	n/a
VC-343-8	.343	8.71	.45	11.43	.500	12.70	5000	1000	n/a
VC-343-16	.343	8.71	.45	11.43	1.000	25.40	2500	500	50
VC-375-8	.375	9.53	.50	12.70	.500	12.70	5000	1000	n/a
VC-375-16	.375	9.53	.50	12.70	1.000	25.40	2500	500	50
VC-406-8	.406	10.31	.53	13.46	.500	12.70	5000	1000	n/a
VC-406-16	.406	10.31	.53	13.46	1.000	25.40	2500	500	50
VC-437-8	.437	11.10	.56	14.22	.500	12.70	5000	1000	n/a
VC-437-16	.437	11.10	.56	14.22	1.000	25.40	2500	500	50
VC-460-8	.460	11.68	.58	14.73	.500	12.70	5000	1000	n/a
VC-460-16	.460	11.68	.58	14.73	1.000	25.40	2500	500	n/a
VC-467-8	.467	11.86	.58	14.73	.500	12.70	5000	1000	n/a
VC-467-16	.467	11.86	.58	14.73	1.000	25.40	2500	500	n/a
VC-490-8	.490	12.45	.61	15.49	.500	12.70	5000	1000	n/a
VC-490-16	.490	12.45	.61	15.49	1.000	25.40	3000	600	n/a
VC-500-8	.500	12.70	.62	15.75	.500	12.70	5000	1000	n/a
VC-500-16	.500	12.70	.62	15.75	1.000	25.40	2500	500	50
VC-531-8	.531	13.49	.65	16.51	.500	12.70	5000	1000	n/a
VC-531-16	.531	13.49	.65	16.51	1.000	25.40	2500	500	n/a
VC-562-8	.562	14.28	.69	17.53	.500	12.70	2500	500	n/a

VC Series continues on next page

Material: Vinyl **Standard Color:** Black

Optional Colors*: White, Brown, Orange, Green, Gray, Blue, Yellow, Red

Series VC Caps are extremely flexible and durable protective closures which are ideal for use as thread protectors, dust and moisture seals, pipe and stud end color coding, and for masking during painting or plating operations.



Note:

- VC-054 is available in lengths up to .750".
- VC-062 is available in lengths up to 1.25".
- VC-080 through VC-125 are available in lengths up to 1.5".
- VC-140 through VC-250 are available in lengths up to 2".
- VC-281 through VC-24000 are available in lengths up to 8".
- Lengths are available in 1/16" (1.6mm) increments. Length tolerance is ±1/16" (1.6mm).

† Mini and Micro Paks available in standard color.

‡ Minimum order for Micro Paks is 2.

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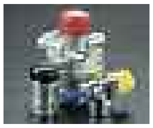
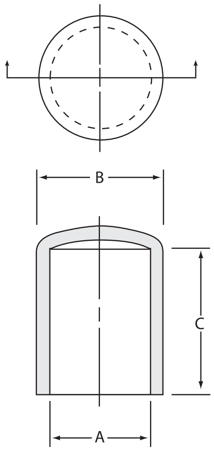
Caps - Vinyl

VC SERIES Round Vinyl Caps (continued)





Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
VC-562-16	.562	14.28	.69	17.53	1.000	25.40	2500	500	n/a
VC-600-8	.600	15.24	.73	18.54	.500	12.70	3000	600	n/a
VC-600-16	.600	15.24	.73	18.54	1.000	25.40	2000	400	n/a
VC-625-8	.625	15.88	.76	19.30	.500	12.70	2500	500	n/a
VC-625-16	.625	15.88	.76	19.30	1.000	25.40	2500	500	50
VC-625-24	.625	15.88	.77	19.56	1.500	38.10	2000	400	n/a
VC-640-8	.640	16.26	.77	19.56	.500	12.70	4000	800	n/a
VC-640-16	.640	16.26	.77	19.56	1.000	25.40	2000	400	n/a
VC-665-8	.665	16.89	.80	20.32	.500	12.70	4000	800	n/a
VC-665-16	.665	16.89	.80	20.32	1.000	25.40	2000	400	n/a
VC-687-8	.687	17.45	.81	20.57	.500	12.70	2500	500	n/a
VC-687-16	.687	17.45	.81	20.57	1.000	25.40	1000	200	n/a
VC-690-8	.690	17.53	.82	20.83	.500	12.70	2500	500	n/a
VC-690-16	.690	17.53	.82	20.83	1.000	25.40	1000	200	n/a
VC-725-8	.725	18.42	.86	21.84	.500	12.70	2500	500	n/a
VC-725-16	.725	18.42	.86	21.84	1.000	25.40	1000	200	n/a
VC-750-8	.750	19.05	.88	22.35	.500	12.70	2500	500	n/a
VC-750-16	.750	19.05	.88	22.35	1.000	25.40	1000	200	25
VC-812-8	.812	20.63	.94	23.88	.500	12.70	2500	500	n/a
VC-812-16	.812	20.63	.94	23.88	1.000	25.40	1000	200	n/a
VC-812-24	.812	20.63	.95	24.13	1.500	38.10	1000	200	n/a
VC-825-8	.825	20.95	.96	24.50	.500	12.70	2500	500	n/a
VC-825-16	.825	20.95	.96	24.50	1.000	25.39	1000	200	n/a
VC-843-8	.843	21.41	.98	24.89	.500	12.70	2500	500	n/a
VC-843-16	.843	21.41	.98	24.89	1.000	25.40	1000	200	n/a
VC-870-8	.870	22.10	1.01	25.65	.500	12.70	1000	200	n/a
VC-870-16	.870	22.10	1.01	25.65	1.000	25.40	1000	200	n/a
VC-875-8	.875	22.23	1.02	25.91	.500	12.70	2500	500	n/a
VC-875-16	.875	22.23	1.02	25.91	1.000	25.40	1000	200	25
VC-875-24	.875	22.23	1.02	25.91	1.500	38.10	1000	200	n/a
VC-937-8	.937	23.80	1.08	27.43	.500	12.70	2500	500	n/a
VC-937-16	.937	23.80	1.08	27.43	1.000	25.40	1000	200	n/a
VC-985-8	.985	25.02	1.13	28.70	.500	12.70	2000	400	n/a
VC-985-16	.985	25.02	1.13	28.70	1.000	25.40	1000	200	n/a
VC-1000-8	1.000	25.40	1.14	28.96	.500	12.70	1000	200	n/a
VC-1000-16	1.000	25.40	1.14	28.96	1.000	25.40	1000	200	25
VC-1000-24	1.000	25.40	1.14	28.96	1.500	38.10	1000	200	n/a
VC-1062-16	1.062	26.97	1.20	30.48	1.000	25.40	1200	240	n/a
VC-1090-16	1.090	27.69	1.22	30.99	1.000	25.40	1200	240	n/a
VC-1125-16	1.125	28.57	1.27	32.26	1.000	25.40	1200	240	n/a
VC-1187-16	1.187	30.14	1.33	33.78	1.000	25.40	1000	200	n/a
VC-1250-16	1.250	31.75	1.39	35.31	1.000	25.40	1000	200	25
VC-1250-24	1.250	31.75	1.39	35.31	1.500	38.10	500	100	n/a
VC-1312-16	1.312	33.32	1.45	36.83	1.000	25.40	800	160	n/a
VC-1312-24	1.312	33.32	1.45	36.83	1.500	38.10	600	120	n/a
VC-1375-16	1.375	34.92	1.52	38.61	1.000	25.40	800	160	n/a
VC-1375-24	1.375	34.92	1.52	38.61	1.500	38.10	400	80	n/a
VC-1437-16	1.437	36.50	1.58	40.06	1.000	25.40	750	150	n/a
VC-1500-16	1.500	38.10	1.64	41.66	1.000	25.40	750	150	25
VC-1500-24	1.500	38.10	1.64	41.66	1.500	38.10	300	60	n/a
VC-1593-16	1.593	40.46	1.72	43.76	1.000	25.40	750	150	n/a
VC-1625-16	1.625	41.27	1.77	44.96	1.000	25.40	750	150	n/a
VC-1687-16	1.687	42.84	1.83	46.48	1.000	25.40	700	140	n/a
VC-1750-16	1.750	44.45	1.89	48.01	1.000	25.40	700	140	n/a
VC-1812-16	1.812	46.02	1.95	49.58	1.000	25.40	1000	200	n/a
VC-1875-16	1.875	47.62	2.02	51.31	1.000	25.40	600	120	n/a
VC-1937-16	1.937	49.20	2.07	52.76	1.000	25.40	600	120	n/a
VC-2000-16	2.000	50.80	2.14	54.36	1.000	25.40	600	120	20
VC-2000-24	2.000	50.80	2.14	54.36	1.500	38.10	300	60	n/a
VC-2125-16	2.125	53.98	2.27	57.79	1.000	25.40	500	100	n/a
VC-2156-16	2.156	54.76	2.30	58.57	1.000	25.40	500	100	n/a
VC-2250-16	2.250	57.15	2.40	60.96	1.000	25.40	500	100	n/a
VC-2250-24	2.250	57.15	2.40	60.96	1.500	38.10	300	60	n/a
VC-2375-16	2.375	60.33	2.52	64.14	1.000	25.40	400	80	n/a
VC-2375-24	2.375	60.33	2.52	64.14	1.500	38.10	300	60	n/a
VC-2460-16	2.460	62.48	2.61	66.29	1.000	25.40	400	80	n/a
VC-2500-16	2.500	63.50	2.65	67.31	1.000	25.40	400	80	n/a
VC-2500-24	2.500	63.50	2.65	67.31	1.500	38.10	250	50	n/a
VC-2625-16	2.625	66.67	2.77	70.49	1.000	25.40	400	80	n/a
VC-2625-24	2.625	66.67	2.77	70.49	1.500	38.10	200	40	n/a
VC-2687-16	2.687	68.25	2.84	72.31	1.000	25.40	400	80	n/a
VC-2750-16	2.750	69.85	2.91	73.91	1.000	25.40	300	60	n/a
VC-2750-24	2.750	69.85	2.91	73.91	1.500	38.10	200	40	n/a
VC-2875-16	2.875	73.03	3.03	77.09	1.000	25.40	250	50	n/a
VC-3000-16	3.000	76.20	3.16	80.26	1.000	25.40	250	50	n/a

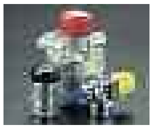
† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

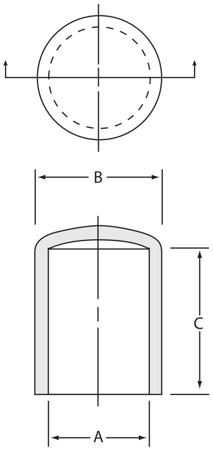
Caps - Vinyl

VC SERIES Round Vinyl Caps (continued)

Expanded!



Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
VC-3000-24	3.000	76.20	3.16	80.26	1.500	38.10	250	50	n/a
VC-3125-16	3.125	79.37	3.28	83.44	1.125	28.58	250	n/a	n/a
VC-3125-24	3.125	79.37	3.28	83.44	1.500	38.10	300	n/a	n/a
VC-3250-18	3.250	82.55	3.41	86.61	1.125	28.58	200	n/a	n/a
VC-3375-18	3.375	85.73	3.53	89.79	1.125	28.58	250	n/a	n/a
VC-3500-18	3.500	88.90	3.66	92.96	1.125	28.58	225	n/a	n/a
VC-3500-24	3.500	88.90	3.66	92.96	1.500	38.10	200	n/a	n/a
VC-3625-18	3.625	92.08	3.78	96.14	1.125	28.58	200	n/a	n/a
VC-3750-18	3.750	92.25	3.91	99.31	1.125	28.58	200	n/a	n/a
VC-3875-18	3.875	98.43	4.03	102.49	1.125	28.58	200	n/a	n/a
VC-4000-20	4.000	101.60	4.16	105.66	1.250	31.75	100	n/a	n/a
VC-4125-20	4.125	104.78	4.28	108.84	1.250	31.75	150	n/a	n/a
VC-4187-20	4.187	106.35	4.34	110.41	1.250	31.75	100	n/a	n/a
VC-4250-20	4.250	107.95	4.41	112.01	1.250	31.75	150	n/a	n/a
VC-4375-20	4.375	111.13	4.53	115.19	1.250	31.75	150	n/a	n/a
VC-4500-20	4.500	114.30	4.66	118.36	1.250	31.75	150	n/a	n/a
VC-4750-20	4.750	120.65	4.91	124.71	1.250	31.75	100	n/a	n/a
VC-5000-22	5.000	127.00	5.18	131.57	1.375	34.93	125	n/a	n/a
VC-5187-22	5.187	131.75	5.36	136.32	1.375	34.93	125	n/a	n/a
VC-5375-22	5.375	136.53	5.55	141.10	1.375	34.93	100	n/a	n/a
VC-5500-22	5.500	139.70	5.68	144.27	1.375	34.93	100	n/a	n/a
VC-5750-22	5.750	146.05	5.93	150.62	1.375	34.93	50	n/a	n/a
VC-6000-24	6.000	152.40	6.18	156.97	1.500	38.10	90	n/a	n/a
VC-6250-24	6.250	158.75	6.43	163.32	1.500	38.10	90	n/a	n/a
VC-6500-24	6.500	165.10	6.68	169.67	1.500	38.10	80	n/a	n/a
VC-6750-24	6.750	171.45	6.93	176.02	1.500	38.10	70	n/a	n/a
VC-7000-24	7.000	177.80	7.18	182.37	1.500	38.10	50	n/a	n/a
VC-7250-24	7.250	184.15	7.43	188.72	1.500	38.10	70	n/a	n/a
VC-7500-24	7.500	190.50	7.68	195.07	1.500	38.10	50	n/a	n/a
VC-7750-28	7.750	196.85	7.93	201.42	1.750	44.45	50	n/a	n/a
VC-8000-28	8.000	203.20	8.18	207.77	1.750	44.45	50	n/a	n/a
VC-8500-28	8.500	215.90	8.68	220.47	1.750	44.45	50	n/a	n/a
VC-8750-28	8.750	222.25	8.93	226.82	1.750	44.45	50	n/a	n/a
VC-9000-28	9.000	228.60	9.20	233.68	1.750	44.45	50	n/a	n/a
VC-9250-28	9.250	234.95	9.45	240.03	1.750	44.45	40	n/a	n/a
VC-9375-28	9.375	238.13	9.57	243.21	1.750	44.45	40	n/a	n/a
VC-9500-28	9.500	241.30	9.70	246.38	1.750	44.45	40	n/a	n/a
VC-9625-28	9.625	244.48	9.82	249.56	1.750	44.45	40	n/a	n/a
VC-9875-28	9.875	250.83	10.07	255.91	1.750	44.45	40	n/a	n/a
VC-10000-32	10.000	254.00	10.20	259.08	2.000	50.80	35	n/a	n/a
VC-10312-32	10.312	261.92	10.51	267.00	2.000	50.80	25	n/a	n/a
VC-10750-32	10.750	273.05	10.95	278.13	2.000	50.80	25	n/a	n/a
VC-11000-32	11.000	279.40	11.20	284.48	2.000	50.80	25	n/a	n/a
VC-11375-32	11.375	288.93	11.57	294.01	2.000	50.80	25	n/a	n/a
VC-11750-32	11.750	298.45	11.95	303.53	2.000	50.80	25	n/a	n/a
VC-12000-32	12.000	304.80	12.20	309.88	2.000	50.80	25	n/a	n/a
VC-12250-32	12.250	311.15	12.45	316.23	2.000	50.80	25	n/a	n/a
VC-12500-32	12.500	317.50	12.70	322.58	2.000	50.80	25	n/a	n/a
VC-12625-32	12.625	320.68	12.82	325.76	2.000	50.80	25	n/a	n/a
VC-12875-32	12.875	327.03	13.07	332.11	2.000	50.80	25	n/a	n/a
VC-13250-32	13.250	336.55	13.47	342.14	2.000	50.80	25	n/a	n/a
VC-13500-32	13.500	342.90	13.72	348.49	2.000	50.80	25	n/a	n/a
VC-13600-32	13.600	345.44	13.82	351.03	2.000	50.80	25	n/a	n/a
VC-14000-32	14.000	355.60	14.22	361.19	2.000	50.80	18	n/a	n/a
VC-14250-32	14.250	361.95	14.47	367.54	2.000	50.80	25	n/a	n/a
VC-14500-32	14.500	368.30	14.72	373.89	2.000	50.80	25	n/a	n/a
VC-15000-32	15.000	381.00	15.22	386.59	2.000	50.80	25	n/a	n/a
VC-15625-32	15.625	396.88	15.84	402.46	2.000	50.80	25	n/a	n/a
VC-15875-32	15.875	403.23	16.11	409.32	2.000	50.80	25	n/a	n/a
VC-16000-32	16.000	406.40	16.24	412.50	2.000	50.80	20	n/a	n/a
VC-16500-32	16.500	419.10	16.74	425.20	2.000	50.80	25	n/a	n/a
VC-17375-40	17.375	441.33	17.61	447.42	2.500	63.50	25	n/a	n/a
VC-18000-40	18.000	457.20	18.24	463.30	2.500	63.50	15	n/a	n/a
VC-19000-40	19.000	482.60	19.24	488.70	2.500	63.50	15	n/a	n/a
VC-20000-40	20.000	508.00	20.24	514.10	2.500	63.50	15	n/a	n/a
VC-21000-40	21.000	533.40	21.24	539.50	2.500	63.50	15	n/a	n/a
VC-24000-48	24.000	609.60	24.24	615.70	3.000	76.20	20	n/a	n/a



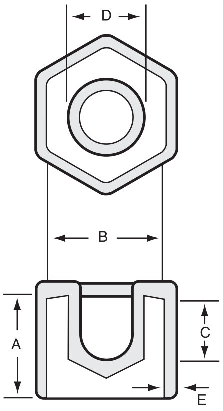
† Mini and Micro Paks available in standard color.

‡ Minimum order for Micro Paks is 2.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Vinyl

AN SERIES Vinyl Hex Caps



Caplug No.	DIMENSIONS										Packaging	
	A		B		C		D		E		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
AN-2	.550	13.97	.375	9.53	.250	6.35	.203	5.16	.055	1.40	5000	1000
AN-3	.625	15.88	.440	11.18	.370	9.40	.203	5.16	.060	1.52	5000	1000
AN-4	.645	16.38	.560	14.22	.435	11.05	.250	6.35	.060	1.52	5000	1000
AN-5	.690	17.53	.625	15.88	.475	12.07	.315	8.00	.060	1.52	5000	1000
AN-6	.725	18.42	.685	17.40	.500	12.70	.375	9.53	.065	1.65	2500	500
AN-8	.875	22.23	.875	22.23	.563	14.30	.515	13.08	.065	1.65	2500	500
AN-10	1.000	25.40	1.000	25.40	.700	17.78	.780	19.81	.065	1.65	1250	250
AN-12	1.000	25.40	1.250	31.75	.700	17.78	.780	19.81	.065	1.65	500	100
AN-14	1.100	27.94	1.375	34.93	.700	17.78	.880	22.35	.065	1.65	1000	200
AN-16	1.100	27.94	1.500	38.10	.750	19.05	1.000	25.40	.065	1.65	1000	200
AN-20	1.250	31.75	1.815	46.10	.950	24.13	1.219	30.96	.065	1.65	500	100
AN-24	1.500	38.10	2.250	57.15	–	–	–	–	.075	1.91	400	80
AN-28	1.500	38.10	2.625	66.68	–	–	–	–	.075	1.91	200	40

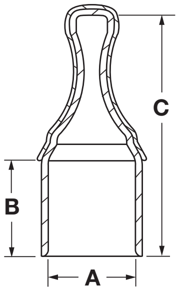
Material: Vinyl **Color:** Yellow
Optional Colors*: White, Black, Brown, Orange, Red, Green, Gray, Blue

Designed for AN-style fittings, Series AN Caps are easy to install and remove. Engineered with aerospace quality, these caps are available in all common hydraulic nut sizes. No tools are required to install Series AN Caps.

VFE SERIES Vinyl Caps with Flat Ergonomic Pull-Tab

Expanded!

Series VFE Caps feature a long, flat ergonomic pull-tab, which allows for easy removal. The ergonomic design offers an easier gripping surface and requires less pull for removal.



Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VFE-312-8	.312	7.92	.500	12.70	1.245	31.62	5000	1000
VFE-320-10	.320	8.13	.625	15.88	1.325	33.66	8000	1000
VFE-375-8	.375	9.53	.500	12.70	1.425	36.20	5000	1000
VFE-406-8	.406	10.31	.500	12.70	1.150	29.21	5000	1000
VFE-420-10	.420	10.67	.625	15.88	1.365	34.67	5000	1000
VFE-437-8	.437	11.10	.500	12.70	1.255	31.88	5000	1000
VFE-450-6	.450	11.43	.375	9.53	1.275	32.39	8000	1000
VFE-470-8	.470	11.94	.500	12.70	1.280	32.51	5000	1000
VFE-500-8	.500	12.70	.500	12.70	1.425	36.20	5000	1000
VFE-530-10	.530	13.46	.625	15.88	1.125	28.58	4000	800
VFE-595-10	.595	15.11	.625	15.88	1.525	38.73	2500	500
VFE-717-16	.717	18.21	.625	15.88	2.130	54.10	2000	400
VFE-750-12	.750	19.05	.750	19.05	1.635	41.53	3000	600
VFE-950-14	.950	24.13	.625	15.88	2.140	54.36	1250	250
VFE-1000-10	1.000	25.40	.625	15.88	1.600	40.64	2500	500
VFE-1125-12	1.125	28.58	.750	19.05	1.775	45.09	2000	400

Material: Vinyl
Colors: Black and Red Optional **Colors*:** White, Brown, Orange, Green, Gray, Blue, Yellow

ISO 9001:2000 Certified
CERTIFICATE # 08-511

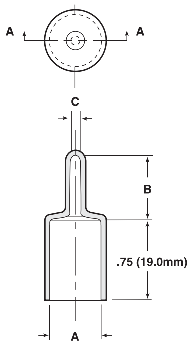
Caps - Vinyl

EZ SERIES Flexible Vinyl Caps with Pull-Tab for Easy Removal

Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
EZ-187-12	.187	4.74	.500	12.70	.093	2.36	5000	1000	n/a
EZ-215-12	.215	5.46	.500	12.70	.093	2.36	5000	1000	n/a
EZ-240-12	.240	6.09	.625	15.87	.125	3.17	4000	800	50
EZ-303-12	.303	7.69	.625	15.87	.125	3.17	4000	800	50
EZ-312-12	.312	7.92	.750	19.05	.122	3.10	4000	800	n/a
EZ-365-12	.365	9.27	.625	15.87	.125	3.17	3500	700	50
EZ-386-12	.386	9.80	.625	15.87	.125	3.17	4000	800	n/a
EZ-406-12	.406	10.31	.625	15.87	.125	3.17	4000	800	n/a
EZ-427-12	.427	10.84	.625	15.87	.125	3.17	3000	600	n/a
EZ-460-12	.460	11.68	.500	12.70	.100	2.54	3000	600	n/a
EZ-490-12	.490	12.44	.687	17.44	.125	3.17	2500	500	50
EZ-521-12	.521	13.23	.625	15.87	.125	3.17	2500	500	n/a
EZ-552-12	.552	14.02	.687	17.44	.125	3.17	2500	500	50
EZ-600-12	.600	15.24	.812	20.62	.187	4.75	2000	400	n/a
EZ-615-12	.615	15.62	.687	17.44	.125	3.17	2000	400	50
EZ-655-12	.655	16.63	.875	22.22	.187	4.75	2000	400	n/a
EZ-670-12	.670	17.02	.800	20.32	.190	4.83	2000	400	n/a
EZ-677-12	.677	17.19	.812	20.62	.187	4.75	2000	400	n/a
EZ-695-12	.695	17.65	.812	20.62	.187	4.75	1500	300	n/a
EZ-735-12	.735	18.66	.812	20.62	.187	4.74	1500	300	25
EZ-760-12	.760	19.30	.800	20.32	.190	4.83	2000	400	n/a
EZ-797-12	.797	20.24	.812	20.62	.187	4.75	1500	300	n/a
EZ-835-12	.835	21.20	.843	21.41	.187	4.74	1500	300	n/a
EZ-860-12	.860	21.84	.843	21.41	.187	4.74	1500	300	25
EZ-922-12	.922	23.41	.875	22.22	.187	4.74	1000	200	n/a
EZ-985-12	.985	25.01	.875	22.22	.187	4.74	1250	250	25
EZ-1048-12	1.048	27.53	1.000	25.40	.187	4.74	1000	200	n/a
EZ-1110-12	1.110	28.19	1.125	28.58	.187	4.74	1000	200	n/a
EZ-1175-12	1.175	29.85	.750	19.05	.325	8.26	1000	200	n/a
EZ-1230-12	1.230	31.24	1.125	28.58	.187	4.74	900	180	n/a
EZ-1355-12	1.355	34.41	1.125	28.58	.250	6.35	800	160	n/a
EZ-1480-12	1.480	37.59	1.000	25.40	.250	6.35	800	160	n/a

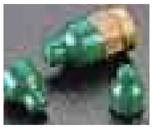
Series EZ Pull-Tab Vinyl Caps feature an extra-long tab centered at the top of the closure which allows the cap to be manually removed easily, eliminating the use of tools which could damage threads or part surfaces. Molded from a specially formulated flexible vinyl which enables a snug fit on parts, thereby providing better protection against dirt, moisture and impact damage.

Material: Vinyl
Colors: Black and Red
Optional Colors*:
White, Brown, Orange, Green, Gray, Blue, Yellow



† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

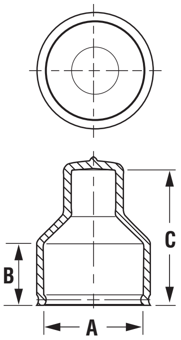
VS SERIES Vinyl Squeeze Pull Caps



Caplug No.	DIMENSIONS							Packaging	
	To Cap Thread Size	A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
VS 875	7/8	.857	21.77	.60	15.24	1.26	32.00	1750	350
VS 1063	1-1/16	1.041	26.44	.64	16.26	1.38	35.05	1250	250
VS 1313	1-5/16	1.307	33.20	.70	17.78	1.61	40.89	750	150
VS 1625	1-5/8	1.591	40.41	.76	19.30	1.63	41.40	600	120

The VS Series caps are used extensively in the aircraft industry. Designed specifically to protect UNJF threads. Squeezing the uniquely engineered pull-tab opens the bottom of the cap slightly, thereby making the removal process much easier.

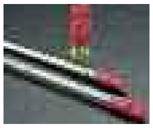
Material: Vinyl
Color: Green

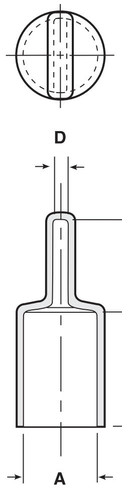


ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Vinyl

VFC SERIES Flexible Vinyl Caps with Flat Pull-Tab for Easy Removal





Caplug No.	DIMENSIONS								Packaging		
	A		B		C		D		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.			
VFC-180-8	.180	4.57	.500	12.70	.500	12.70	.062	1.57	5000	1000	n/a
VFC-180-16	.180	4.57	.500	12.70	1.000	25.40	.062	1.57	5000	1000	100
VFC-207-8	.207	5.25	.625	15.88	.500	12.70	.125	3.18	5000	1000	n/a
VFC-207-16	.207	5.25	.625	15.88	1.000	25.40	.125	3.18	5000	1000	n/a
VFC-240-8	.240	6.09	.625	15.88	.500	12.70	.125	3.18	5000	1000	n/a
VFC-240-16	.240	6.09	.625	15.88	1.000	25.40	.125	3.18	5000	1000	n/a
VFC-302-8	.302	7.67	.625	15.88	.500	12.70	.125	3.18	4000	800	n/a
VFC-302-16	.302	7.67	.625	15.88	1.000	25.40	.125	3.18	4000	800	n/a
VFC-365-8	.365	9.27	.625	15.88	.500	12.70	.125	3.18	5000	1000	n/a
VFC-365-12	.365	9.27	.625	15.88	.750	19.05	.125	3.18	3000	600	n/a
VFC-365-16	.365	9.27	.625	15.88	1.000	25.40	.125	3.18	2500	500	n/a
VFC-396-8	.396	10.05	.625	15.88	.500	12.70	.125	3.18	3000	600	n/a
VFC-396-16	.396	10.05	.625	15.88	1.000	25.40	.125	3.18	3000	600	n/a
VFC-410-8	.410	10.41	.687	17.45	.500	12.70	.500	3.18	3000	600	n/a
VFC-410-16	.410	10.41	.687	17.45	1.000	25.40	1.000	3.18	2000	400	50
VFC-427-8	.427	10.84	.625	15.88	.500	12.70	.125	3.18	3000	600	n/a
VFC-427-16	.427	10.84	.625	15.88	1.000	25.40	.125	3.18	2500	500	50
VFC-470-8	.470	11.93	.625	15.88	.500	12.70	.125	3.18	2000	400	n/a
VFC-470-16	.470	11.93	.625	15.88	1.000	25.40	.125	3.18	2000	400	n/a
VFC-490-8	.490	12.44	.625	15.88	.500	12.70	.125	3.18	2500	500	n/a
VFC-490-16	.490	12.44	.625	15.88	1.000	25.40	.125	3.18	1500	300	n/a
VFC-521-8	.521	13.23	.625	15.88	.500	12.70	.125	3.18	2000	400	n/a
VFC-521-16	.521	13.23	.625	15.88	1.000	25.40	.125	3.18	1500	300	50
VFC-552-8	.552	14.02	.687	17.45	.500	12.70	.125	3.18	3000	600	n/a
VFC-552-12	.552	14.02	.687	17.45	.750	19.05	.125	3.18	2000	400	n/a
VFC-552-16	.552	14.02	.687	17.45	1.000	25.40	.125	3.18	1500	300	n/a
VFC-590-8	.590	14.98	.625	15.88	.500	12.70	.125	3.18	1500	300	n/a
VFC-590-16	.590	14.98	.625	15.88	1.000	25.40	.125	3.18	1500	300	50
VFC-615-8	.615	15.62	.687	17.45	.500	12.70	.125	3.18	2000	400	n/a
VFC-615-16	.615	15.62	.687	17.45	1.000	25.40	.125	3.18	2000	400	n/a
VFC-677-8	.677	17.19	.687	17.45	.500	12.70	.125	3.18	1000	200	n/a
VFC-677-16	.677	17.19	.687	17.45	1.000	25.40	.125	3.18	1000	200	25
VFC-735-8	.735	18.66	.812	20.63	.500	12.70	.187	4.75	1000	200	n/a
VFC-735-12	.735	18.66	.812	20.63	.750	19.05	.187	4.75	1250	250	n/a
VFC-735-16	.735	18.66	.812	20.63	1.000	25.40	.187	4.75	1000	200	n/a
VFC-797-8	.797	20.24	.812	20.63	.500	12.70	.187	4.75	900	180	n/a
VFC-797-16	.797	20.24	.812	20.63	1.000	25.40	.187	4.75	900	180	25
VFC-865-8	.865	21.97	.843	21.41	.500	12.70	.187	4.75	1000	200	n/a
VFC-865-16	.865	21.97	.843	21.41	1.000	25.40	.187	4.75	800	160	n/a
VFC-990-8	.990	25.14	.875	22.23	.500	12.70	.187	4.75	600	120	n/a
VFC-990-16	.990	25.14	.875	22.23	1.000	25.40	.187	4.75	600	120	25
VFC-1230-16	1.230	31.24	1.125	28.58	1.000	25.40	.187	4.75	500	100	n/a
VFC-1230-24	1.230	31.24	1.125	28.58	1.500	38.10	.187	4.75	500	100	n/a
VFC-1605-16	1.605	40.76	1.250	31.75	1.000	25.40	2.500	6.35	400	80	n/a
VFC-1605-24	1.605	40.76	1.250	31.75	1.500	38.10	2.500	6.35	400	80	n/a

Note:

- VFC-180 through VFC-240 are available in lengths up to 1.5".
- VFC-302 through VFC-1605 are available in lengths up to 4".

† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

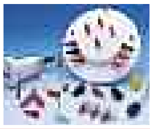
Series VFC Caps feature a long, flat pull-tab centered at the top of the closure, which allows for easy removal of the cap.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Vinyl

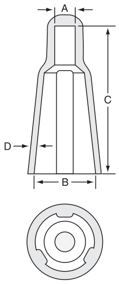
VVC VENT-A-CAP™ SERIES Vinyl Vented Caps



Material: Vinyl
Colors: Black
Optional Colors*:
White, Brown, Orange, Green, Gray, Blue, Yellow, Red

20 Series

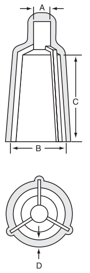
Caplug No.	Tube Size	DIMENSIONS								Packaging	
		A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
VVC-2071	1/4 x 1/16	.200	5.08	.425	10.80	1.600	40.64	.055	1.40	5000	1000
VVC-2072	1/4 x 3/32	.250	6.35	.500	12.70	1.600	40.64	.055	1.40	5000	1000
VVC-2073	3/8 x 1/16	.250	6.35	.525	13.34	1.600	40.64	.055	1.40	5000	1000
VVC-2074	3/8 x 3/32	.250	6.35	.610	15.49	1.600	40.64	.055	1.40	5000	1000
VVC-2075	1/2 x 1/16	.250	6.35	.650	16.51	1.600	40.64	.055	1.40	5000	1000
VVC-2076	1/2 x 3/32	.275	6.99	.735	18.67	1.600	40.64	.055	1.40	4000	800



20 Series

22 Series

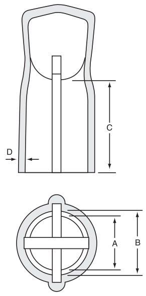
Caplug No.	Tube Size	DIMENSIONS								Packaging	
		A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
VVC-2220	1/8 x 1/32	.080	2.03	.190	4.83	.430	10.92	.045	1.14	10000	1000
VVC-2221	1/8 x 1/16	.156	3.96	.310	7.87	1.075	37.31	.055	1.40	5000	1000
VVC-2222	3/16 x 1/16	.156	3.96	.340	8.64	1.075	27.31	.055	1.40	5000	1000
VVC-2223	1/4 x 1/16	.200	5.08	.400	10.16	1.075	27.31	.055	1.40	5000	1000
VVC-2224	1/4 x 1/32	.240	6.10	.450	11.43	1.075	27.31	.055	1.40	5000	1000
VVC-2225	3/8 x 1/16	.250	6.35	.510	12.95	1.075	27.31	.055	1.40	5000	1000
VVC-2226	3/8 x 3/32	.250	6.35	.590	14.99	1.175	29.85	.055	1.40	4000	800
VVC-2227	1/2 x 1/16	.312	7.92	.650	16.51	1.175	29.85	.060	1.52	4000	800
VVC-2228	1/2 x 3/32	.312	7.92	.700	17.78	1.175	29.85	.060	1.52	3000	600
VVC-2229	1/2 x 1/8	.312	7.92	.750	19.05	1.175	29.85	.060	1.52	3000	600
VVC-2230	5/8 x 3/32	.330	8.38	.880	23.35	1.175	29.85	.065	1.65	3000	600



22 Series

26 Series

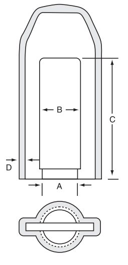
Caplug No.	Tube Size	DIMENSIONS								Packaging	
		A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
VVC-2600	1/8 x 1/32	.160	4.06	.210	5.33	.400	10.16	.045	1.14	10000	1000
VVC-2601	1/8 x 1/16	.190	4.83	.275	6.99	.650	16.25	.055	1.40	10000	1000
VVC-2602	3/16 x 1/16	.240	6.10	.340	8.64	.650	16.25	.055	1.40	8000	1000
VVC-2603	1/4 x 1/16	.325	8.26	.400	10.16	.750	19.05	.055	1.40	5000	1000
VVC-2604	1/4 x 3/32	.375	9.53	.470	11.94	.750	19.05	.055	1.40	5000	1000
VVC-2605	3/8 x 1/16	.440	11.18	.525	13.34	.750	19.05	.055	1.40	5000	1000
VVC-2606	3/8 x 3/32	.475	12.07	.585	14.86	.750	19.05	.055	1.40	5000	1000
VVC-2607	1/2 x 1/16	.550	13.97	.650	16.51	.800	20.32	.060	1.52	3000	600
VVC-2608	1/2 x 3/32	.630	16.00	.710	18.03	.800	20.32	.060	1.52	3000	600
VVC-2609	1/2 x 1/8	.650	16.51	.775	19.69	.800	20.32	.060	1.52	3000	600
VVC-2610	5/8 x 3/32	.775	19.69	.840	21.34	.800	20.32	.060	1.52	3000	600



26 Series

29 Series

Caplug No.	Tube Size	DIMENSIONS								Packaging	
		A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
VVC-2920	1/8 x 1/16	.230	5.84	.281	7.14	.700	17.78	.045	1.14	5000	1000
VVC-2922	3/16 x 1/16	.292	7.45	.343	8.71	.650	16.51	.050	1.27	5000	1000
VVC-2924	1/4 x 1/16	.355	9.02	.415	10.54	.750	19.05	.055	1.40	5000	1000
VVC-2926	1/4 x 3/32	.417	10.59	.477	12.12	.750	19.05	.055	1.40	5000	1000
VVC-2928	3/8 x 1/16	.480	12.19	.540	13.72	.850	21.59	.060	1.52	5000	1000
VVC-2930	3/8 x 3/32	.542	13.77	.602	15.29	.900	22.86	.060	1.52	5000	1000
VVC-2932	1/2 x 3/32	.667	16.94	.737	18.72	.875	22.23	.060	1.52	3000	600
VVC-2934	5/8 x 3/32	.792	20.12	.875	22.23	.875	22.23	.065	1.65	3000	600



29 Series

The Vent-A-Cap Series consists of several styles of caps used to protect the ends of tubing connectors and instrument tips. Vented for air release and easy removal, the vented caps are also useful in the masking industry. Venting for airflow assures that the cap won't pop off during extreme heat. Caps used in the medical industry allow for airflow during ETO gas sterilization. Series 20, Series 22 and Series 26 are tapered to fit multiple sizes for a variety of tubing and instruments. Series 29 is offered in a straight style.

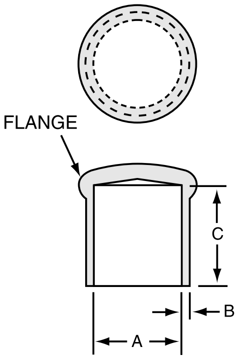
Note:
VVC Series is available in standard catalog length only.

Caps - Vinyl

VCF SERIES Vinyl Caps with Flanges

Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VCF-125-8	.125	3.17	.035	.89	.500	12.70	5000	1000
VCF-125-16	.125	3.17	.035	.89	1.000	25.40	5000	1000
VCF-140-8	.140	3.55	.040	1.02	.500	12.70	5000	1000
VCF-140-16	.140	3.55	.040	1.02	1.000	25.40	5000	1000
VCF-156-8	.156	3.96	.040	1.02	.500	12.70	5000	1000
VCF-156-16	.156	3.96	.040	1.02	1.000	25.40	5000	1000
VCF-172-8	.172	4.36	.040	1.02	.500	12.70	5000	1000
VCF-172-16	.172	4.36	.040	1.02	1.000	25.40	5000	1000
VCF-187-8	.187	4.74	.040	1.02	.500	12.70	5000	1000
VCF-187-16	.187	4.74	.040	1.02	1.000	25.40	5000	1000
VCF-187-24	.187	4.74	.040	1.02	1.500	38.10	4000	800
VCF-203-8	.203	5.15	.045	1.14	.500	12.70	5000	1000
VCF-203-16	.203	5.15	.045	1.14	1.000	25.40	5000	1000
VCF-218-8	.218	5.53	.045	1.14	.500	12.70	5000	1000
VCF-218-16	.218	5.53	.045	1.14	1.000	25.40	5000	1000
VCF-224-8	.224	5.69	.045	1.14	.500	12.70	5000	1000
VCF-224-16	.224	5.69	.045	1.14	1.000	25.40	5000	1000
VCF-234-8	.234	5.94	.045	1.14	.500	12.70	5000	1000
VCF-234-16	.234	5.94	.045	1.14	1.000	25.40	5000	1000
VCF-250-8	.250	6.35	.050	1.27	.500	12.70	5000	1000
VCF-250-16	.250	6.35	.050	1.27	1.000	25.40	5000	1000
VCF-281-8	.281	7.13	.050	1.27	.500	12.70	5000	1000
VCF-281-16	.281	7.13	.050	1.27	1.000	25.40	5000	1000
VCF-304-8	.304	7.72	.055	1.40	.500	12.70	5000	1000
VCF-304-16	.304	7.72	.055	1.40	1.000	25.40	4000	800
VCF-312-8	.312	7.92	.055	1.40	.500	12.70	5000	1000
VCF-312-16	.312	7.92	.055	1.40	1.000	25.40	5000	1000
VCF-312-24	.312	7.92	.055	1.40	1.500	38.10	5000	1000
VCF-343-8	.343	8.71	.055	1.40	.500	12.70	5000	1000
VCF-343-16	.343	8.71	.055	1.40	1.000	25.40	2500	500
VCF-375-8	.375	9.52	.060	1.52	.500	12.70	5000	1000
VCF-375-16	.375	9.52	.060	1.52	1.000	25.40	2500	500
VCF-406-8	.406	10.31	.060	1.52	.500	12.70	5000	1000
VCF-406-16	.406	10.31	.060	1.52	1.000	25.40	2500	500
VCF-437-8	.437	11.09	.060	1.52	.500	12.70	5000	1000
VCF-437-16	.437	11.09	.060	1.52	1.000	25.40	2500	500
VCF-467-8	.467	11.86	.060	1.52	.500	12.70	5000	1000
VCF-467-16	.467	11.86	.060	1.52	1.000	25.40	2500	500
VCF-500-8	.500	12.70	.060	1.52	.500	12.70	5000	1000
VCF-500-16	.500	12.70	.060	1.52	1.000	25.40	2500	500
VCF-531-8	.531	13.48	.060	1.52	.500	12.70	5000	1000
VCF-531-16	.531	13.48	.060	1.52	1.000	25.40	2500	500
VCF-562-8	.562	14.27	.065	1.65	.500	12.70	2500	500
VCF-562-16	.562	14.27	.065	1.65	1.000	25.40	2500	500
VCF-600-8	.600	15.24	.065	1.65	.500	12.70	3000	600
VCF-600-16	.600	15.24	.065	1.65	1.000	25.40	2000	400
VCF-625-8	.625	15.87	.065	1.65	.500	12.70	2500	500
VCF-625-16	.625	15.87	.065	1.65	1.000	25.40	2500	500
VCF-625-24	.625	15.87	.065	1.65	1.500	38.10	2000	400
VCF-640-8	.640	16.26	.065	1.65	.500	12.70	4000	800
VCF-640-16	.640	16.26	.065	1.65	1.000	25.40	2000	400
VCF-665-8	.665	16.89	.065	1.65	.500	12.70	4000	800
VCF-665-16	.665	16.89	.065	1.65	1.000	25.40	2000	400
VCF-687-8	.687	17.44	.065	1.65	.500	12.70	2500	500
VCF-687-16	.687	17.44	.065	1.65	1.000	25.40	1000	200
VCF-750-8	.750	19.05	.065	1.65	.500	12.70	2500	500
VCF-750-16	.750	19.05	.065	1.65	1.000	25.40	1000	200
VCF-812-8	.812	20.62	.065	1.65	.500	12.70	2500	500
VCF-812-16	.812	20.62	.065	1.65	1.000	25.40	1000	200
VCF-812-24	.812	20.62	.065	1.65	1.500	38.10	1000	200
VCF-843-8	.843	21.41	.070	1.79	.500	12.70	2500	500
VCF-843-16	.843	21.41	.070	1.79	1.000	25.40	1000	200
VCF-875-8	.875	22.22	.070	1.79	.500	12.70	2500	500
VCF-875-16	.875	22.22	.070	1.79	1.000	25.40	1000	200
VCF-875-24	.875	22.22	.070	1.79	1.500	38.10	1000	200

Series VCF caps are designed for easy removal with a flange at the closed end large enough to grasp, yet small enough to not interfere with the application.



Note:

- VCF-125 is available in lengths up to 1.5"
- VCF-140 through VCF-250 are available in lengths up to 2"
- VCF-281 through VCF-3000 are available in lengths up to 8"

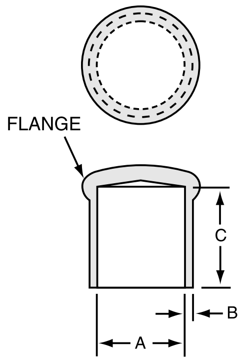
Material: Vinyl
Colors: Black
Optional Colors*:
White, Brown, Orange, Green, Gray, Blue, Yellow, Red

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Vinyl

VCF SERIES Vinyl Caps with Flanges (cont.)

Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VCF-937-8	.937	23.79	.070	1.79	.500	12.70	2500	500
VCF-937-16	.937	23.79	.070	1.79	1.000	25.40	1000	200
VCF-985-8	.985	25.02	.070	1.79	.500	12.70	2000	400
VCF-985-16	.985	25.02	.070	1.79	1.000	25.40	1000	200
VCF-1000-8	1.000	25.40	.070	1.79	.500	12.70	1000	200
VCF-1000-16	1.000	25.40	.070	1.79	1.000	25.10	1000	200
VCF-1000-24	1.000	25.40	.070	1.79	1.500	38.10	1000	200
VCF-1062-16	1.062	26.97	.070	1.79	1.000	25.40	1200	240
VCF-1125-16	1.125	28.57	.070	1.79	1.000	25.40	1200	240
VCF-1187-16	1.125	28.57	.070	1.79	1.000	25.40	1000	200
VCF-1250-16	1.250	31.75	.070	1.79	1.000	25.40	1000	200
VCF-1250-24	1.250	31.75	.070	1.79	1.500	38.10	500	100
VCF-1312-16	1.312	33.32	.070	1.79	1.000	25.40	800	160
VCF-1312-24	1.312	33.32	.070	1.79	1.500	38.10	600	120
VCF-1375-16	1.375	34.92	.070	1.79	1.000	25.40	800	160
VCF-1375-24	1.375	34.92	.070	1.79	1.500	38.10	400	80
VCF-1500-16	1.500	38.10	.070	1.79	1.000	25.40	750	150
VCF-1500-24	1.500	38.10	.070	1.79	1.500	38.10	300	60
VCF-1625-16	1.625	41.27	.070	1.79	1.000	25.40	750	150
VCF-1687-16	1.687	42.84	.070	1.79	1.000	25.40	700	140
VCF-1750-16	1.750	44.45	.070	1.79	1.000	25.40	700	140
VCF-1875-16	1.875	47.62	.070	1.79	1.000	25.40	600	120
VCF-2000-16	2.000	50.80	.070	1.79	1.000	25.40	600	120
VCF-2000-24	2.000	50.80	.070	1.79	1.500	38.10	300	60
VCF-2125-16	2.125	53.98	.070	1.79	1.000	25.40	500	100
VCF-2250-16	2.250	57.15	.070	1.79	1.000	25.40	500	100
VCF-2250-24	2.250	57.15	.070	1.79	1.500	38.10	300	60
VCF-2375-16	2.375	60.33	.070	1.79	1.000	25.40	400	80
VCF-2375-24	2.375	60.33	.070	1.79	1.500	38.10	300	60
VCF-2500-16	2.500	63.50	.070	1.79	1.000	25.40	400	80
VCF-2500-24	2.500	63.50	.070	1.79	1.500	38.10	300	60
VCF-2625-16	2.625	66.68	.070	1.79	1.000	25.40	400	80
VCF-2625-24	2.625	66.68	.070	1.79	1.500	38.10	200	40
VCF-2750-16	2.750	69.85	.070	1.79	1.000	25.40	300	60
VCF-2750-24	2.750	69.85	.070	1.79	1.500	28.10	200	40
VCF-3000-16	3.000	76.20	.070	1.79	1.000	25.40	250	50
VCF-3000-24	3.000	76.20	.070	1.79	1.500	38.10	250	50



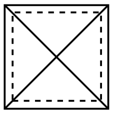
Material: Vinyl
Colors: Black
Optional Colors*:
White, Brown, Orange, Green, Gray, Blue, Yellow, Red

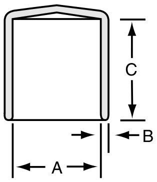
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Caps - Vinyl

VSC SERIES Vinyl Square Caps

ISO 9001:2000 Certified
CERTIFICATE # 08-511





Note:

- VSC-250 through VSC-750 are available in lengths up to 4".
- VSC-1000 through VSC-4000 are available in lengths up to 8".

Material: Vinyl **Color:** Black
Optional Colors*: White, Brown, Orange, Red, Green, Gray, Blue, Yellow

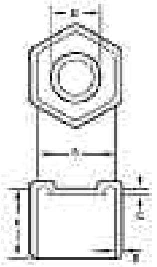
Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VSC 250-8	.250	6.35	.065	1.65	.500	12.70	5000	1000
VSC 250-16	.250	6.35	.065	1.65	1.000	25.40	5000	1000
VSC 312-8	.312	7.92	.060	1.52	.500	12.70	5000	1000
VSC 312-16	.312	7.92	.060	1.52	1.000	25.40	5000	1000
VSC 375-8	.375	9.53	.060	1.52	.500	12.70	2500	500
VSC 375-16	.375	9.53	.060	1.52	1.000	25.40	2500	500
VSC 437-8	.437	11.10	.060	1.52	.500	12.70	5000	1000
VSC 437-16	.437	11.10	.060	1.52	1.000	25.40	5000	1000
VSC 500-8	.500	12.70	.065	1.65	.500	12.70	3000	600
VSC 500-16	.500	12.70	.065	1.65	1.000	25.40	2000	400
VSC 625-8	.625	15.87	.065	1.65	.500	12.70	2500	500
VSC 625-16	.625	15.87	.065	1.65	1.000	25.40	1500	300
VSC 750-8	.750	19.05	.065	1.65	.500	12.70	2000	400
VSC 750-16	.750	19.05	.065	1.65	1.000	25.40	1000	200
VSC 875-14	.870	22.22	.060	1.65	.870	22.22	1000	200
VSC 1000-8	1.000	25.40	.065	1.65	.500	12.70	1500	300
VSC 1000-16	1.000	25.40	.065	1.65	1.000	25.40	900	180
VSC 1250-8	1.250	31.75	.065	1.65	.500	12.70	1000	200
VSC 1250-16	1.250	31.75	.065	1.65	1.000	25.40	700	140
VSC 1500-8	1.500	38.10	.065	1.65	.500	12.70	900	180
VSC 1500-16	1.500	38.10	.065	1.65	1.000	25.40	600	120
VSC 1625-8**	1.625	41.28	.070	1.78	.500	12.70	1000	200
VSC 1625-16**	1.625	41.28	.070	1.78	1.000	25.40	500	100
VSC 1750-8	1.750	44.45	.065	1.65	.500	12.70	700	140
VSC 1750-16	1.750	44.45	.065	1.65	1.000	25.40	500	100
VSC 1875-8	1.875	47.62	.065	1.65	.500	12.70	600	120
VSC 1875-16	1.875	47.62	.065	1.65	1.000	25.40	400	80
VSC 2000-8	2.000	50.80	.065	1.65	.500	12.70	600	120
VSC 2000-16	2.000	50.80	.065	1.65	1.000	25.40	400	80
VSC 2500-16	2.500	63.50	.065	1.65	1.000	25.40	300	60
VSC 3000-16	3.000	76.20	.065	1.65	1.000	25.40	200	40
VSC 3500-16	3.500	88.90	.065	1.65	1.000	25.40	200	40
VSC 4000-16	4.000	101.60	.065	1.65	1.000	25.40	100	20
VSC 8000-24	8.000	203.20	.085	2.16	1.500	38.10	10	n/a

****VSC 1625-8 and VSC 1625-16 have radius edges**

Series VSC Vinyl Square Caps are strong and tough, yet flexible enough to stretch for a perfect fit. Designed for use with square tubing, these caps are excellent finishing parts. Series VSC is available in a wide range of sizes.

MS SERIES Vinyl Hex Caps

Series MS Caps, used for MS-style fittings, are easy to install and remove. Engineered with aerospace quality, these caps are available in all common hydraulic nut sizes. No tools are required to install Series MS Caps.



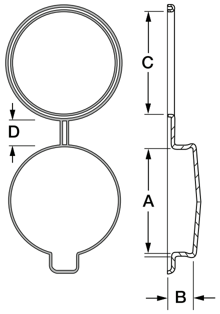
Caplug No.	DIMENSIONS										Packaging	
	A		B		C		D		E		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
MS-2	.550	13.97	.375	9.53	.100	2.54	.190	4.83	.055	1.40	5000	1000
MS-3	.625	15.88	.440	11.18	.100	2.54	.245	6.22	.060	1.52	5000	1000
MS-4	.725	18.42	.560	14.22	.100	2.54	.250	6.35	.060	1.52	5000	1000
MS-6	.800	20.32	.685	17.40	.100	2.54	.375	9.53	.060	1.52	5000	1000
MS-8	.825	20.96	.870	22.10	.110	2.79	.500	12.70	.065	1.60	1000	200
MS-10	1.000	25.40	.995	25.27	.190	4.83	.635	16.13	.065	1.65	1000	200
MS-11	1.000	25.40	1.125	28.58	–	–	–	–	.065	1.65	1250	500
MS-12	1.020	25.91	1.250	31.75	.190	4.83	.795	20.19	.065	1.65	500	100
MS-14	1.050	26.67	1.375	34.93	.125	3.18	.860	21.84	.065	1.65	1000	200
MS-16	1.180	29.97	1.500	38.10	.125	3.18	1.000	25.40	.065	1.65	1000	200
MS-20	1.250	31.75	1.815	46.10	.125	3.18	1.225	31.12	.065	1.65	500	100
MS-24	1.500	38.10	2.250	57.15	–	–	–	–	.075	1.91	400	80
MS-28	1.500	38.10	2.625	66.68	–	–	–	–	.075	1.91	200	40

Material: Vinyl **Colors:** Yellow
Colors*: White, Black, Brown, Orange, Red, Green, Gray, Blue

Caps - Vinyl

VTC SERIES Vinyl Tethered Caps

Caplug No.	DIMENSIONS								Packaging	
	A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
VTC-437-8	.437	11.10	.500	12.70	.468	11.88	.500	12.70	3000	600
VTC-500-8	.500	12.70	.500	12.70	.463	11.76	.500	12.70	3500	700
VTC-562-8	.562	14.27	.500	12.70	.593	15.06	.500	12.70	3000	600
VTC-625-8	.625	15.87	.500	12.70	.588	14.93	.500	12.70	3000	600
VTC-725-8	.725	18.41	.500	12.70	.712	18.08	.500	12.70	2500	500
VTC-750-8	.750	19.04	.500	12.70	.781	19.83	.500	12.70	2000	400
VTC-812-16	.812	20.62	1.000	25.39	.843	21.40	.500	12.70	1500	300
VTC-850-8	.850	21.58	.500	12.70	.813	20.64	.500	12.70	2000	400
VTC-875-8	.875	22.22	.500	12.70	.838	21.28	.500	12.70	2000	400
VTC-875-16	.875	22.22	1.000	25.39	.838	21.28	.500	12.70	1500	300
VTC-937-16	.937	23.79	1.000	25.39	.968	24.58	.750	19.05	1250	250
VTC-1000-16	1.000	25.39	1.000	25.39	1.026	26.05	.750	19.05	1000	200
VTC-1062-8	1.062	26.96	.500	12.70	1.125	28.56	.750	19.05	1500	300
VTC-1103-16	1.103	28.01	1.000	25.39	1.129	28.67	.750	19.05	1000	200
VTC-1125-16	1.125	28.56	1.000	25.39	1.188	30.16	.750	19.05	1250	250
VTC-1250-16	1.250	31.74	1.000	25.39	1.313	33.34	.750	19.05	1000	200
VTC-1312-16	1.312	33.31	1.000	25.39	1.318	33.46	.750	19.05	1000	200
VTC-1375-8	1.375	34.91	.500	12.70	1.438	36.51	.750	19.05	900	180
VTC-1437-8	1.437	36.49	.500	12.70	1.500	38.09	.750	19.05	800	160
VTC-1500-16	1.500	38.09	1.000	25.39	1.526	38.75	.750	19.05	800	160
VTC-1687-8	1.687	42.83	.500	12.70	1.750	44.43	.750	19.05	700	140
VTC-1750-12	1.750	44.43	.750	19.05	1.693	42.99	.750	19.05	700	140
VTC-1875-12	1.875	47.61	.750	19.05	1.938	49.21	.750	19.05	600	120
VTC-2000-12	2.000	50.78	.750	19.05	2.063	52.38	.750	19.05	600	120
VTC-2375-12	2.375	60.30	.750	19.05	2.438	61.90	.750	19.05	500	100
VTC-2625-12	2.625	66.65	.750	19.05	2.688	68.25	.750	19.05	400	80
VTC-2750-12	2.750	69.82	.750	19.05	2.813	71.42	.750	19.05	400	80
VTC-2875-12	2.875	73.00	.750	19.05	2.938	74.60	.750	19.05	300	60
VTC-3125-12	3.125	79.34	.750	19.05	3.188	80.94	.750	19.05	300	60
VTC-3625-12	3.625	92.04	.750	19.05	3.688	93.64	.750	19.05	250	50



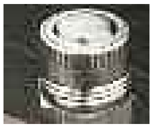
Material: Vinyl
Colors: Black
Optional Colors*:
Red, White, Brown,
Orange, Green,
Gray, Blue, Yellow

Vinyl tethered caps are ideal for applications that need removable and reusable protection. The soft vinyl keeps fittings protected from impact damage, contamination, dirt and moisture. For your convenience, we've designed these caps with a tether to allow them to be hung on an application when not in use. You won't lose any more caps and they'll always be right where you need them. The VTC Series is available in a wide variety of colors for color-coding purposes.

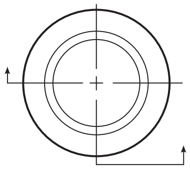
ISO 9001:2000 Certified
CERTIFICATE # 08-511

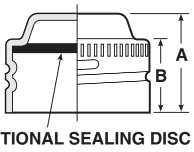
Caps - Threaded

ASC SERIES Threaded Aluminum Caps for Threaded Flared Fittings



Caplug No.	DIMENSIONS						Packaging	
	To Fit Tube Size	To Fit Thread Size	A		B		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.		
ASC-2	1/8	5/16–24	.42	10.67	.33	9.65	5000	1000
ASC-3	3/16	3/8–24	.36	9.14	.30	7.62	5000	1000
ASC-4	1/4	7/16–20	.54	13.72	.46	11.68	5000	1000
ASC-5	5/16	1/2–20	.52	13.21	.43	10.92	5000	1000
ASC-6	3/8	9/16–18	.54	13.72	.46	11.68	6000	1000
ASC-7	7/16	5/8–18	.61	15.49	.52	13.21	5000	1000
ASC-8	1/2	3/4–16	.64	16.26	.55	13.97	6000	1000
ASC-10	5/8	7/8–14	.74	18.80	.65	16.51	3700	500
ASC-12	3/4	1-1/16–12	.85	21.59	.76	19.30	2200	500
ASC-16	1	1-5/16–12	.86	21.84	.76	19.30	1400	200
ASC-20	1-1/4	1-5/8–12	.87	22.22	.71	18.25	950	190





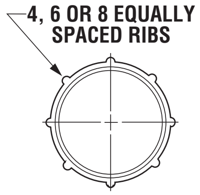
A standard aerospace and fluid power protective cap, Series ASC has a nose-section design that forms a low-pressure seal on threaded flared fittings. A more positive seal is possible with the addition of a sealing disc (Series ASC-DN). Stock sealing discs are Neoprene; Butyl or Buna N rubber are also available.

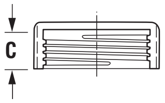
Material: 3003-0 Aluminum Alloy **Color:** Natural (Silver) **Applicable Specs:** MIL-C-5501/3, NAS-817, NAS-835

DC SERIES UN/UNS Caps

This series, designed for use in aircraft and hydraulic equipment applications, seals out contaminants while protecting threads. The rolled threads allow the DC cap to be pushed on or threaded on. Threads meet UN and UNS specifications.

Caplug No.	DIMENSIONS				Packaging	
	To Fit Tube Size	To Fit Thread Size	C		Carton Quant.	Mini Pak Quant.
			in.	mm.		
DC 3	3/16	3/8–28	.20	5.08	10000	2000
DC 4	1/4	7/16–24	.24	6.10	10000	2000
DC 5	5/16	1/2–24	.24	6.10	10000	2000
DC 6	3/8	9/16–20	.26	6.60	6500	1300
DC 8	1/2	23/32–20	.27	6.86	7500	1500
DC 10	5/8	27/32–18	.34	8.64	5000	1000
DC 12	3/4	1–16	.38	9.65	3500	700
DC 14	7/8	1-1/8–16	.40	10.16	3000	600
DC 16	1	1-1/4–14	.43	10.92	2000	400
DC 20	1-1/4	1-33/64–14	.43	10.92	1500	300
DC 21S	1-1/4	1-37/64–14	.43	10.92	1500	300
DC 24	1-1/2	1-25/32–14	.50	12.70	1000	200
DC 25S	1-1/2	1-27/32–14	.50	12.70	1000	200





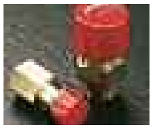
Material: High-Density Polyethylene **Color:** Blue **Applicable Spec:** MIL-8779-ANSI B1.1

ISO 9001:2000 Certified
CERTIFICATE # 08-511

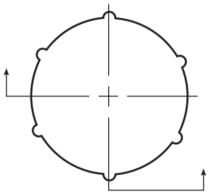
Caps - Threaded

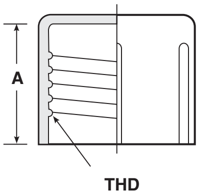
Expanded!

CD SERIES Threaded Plastic Caps for Flared JIC Fittings



Caplug No.	DIMENSIONS					Packaging	
	To Fit Nominal Tubing Size	To Fit Thread Size	A		No. of Knurls	Carton Quant.	Mini Pak Quant.
			in.	mm.			
CD-2	–	1/4–36	.22	5.55	4	5000	1000
CD-3	3/16	3/8–24	.47	11.94	4	5000	1000
CD-4	1/4	7/16–20	.47	11.94	4	5000	1000
CD-41	1/4	7/16–24	.30	7.62	4	5000	1000
CD-5	5/16	1/2–20	.47	11.94	6	5000	1000
TC-40	5/16	1/2–20	.31	7.87	6	5000	1000
TC-42	5/16	1/2–20	.88	22.35	6	5000	1000
CD-6	3/8	9/16–18	.53	13.46	6	5000	1000
TC-6	3/8	5/8–18	.47	11.94	6	7500	1500
CD-6A	3/8	5/8–18	.53	13.46	6	5000	1000
TC-63	3/8	5/8–18	.75	19.05	6	5000	1000
CD-67	–	5/8–24	.41	10.41	6	5000	1000
CD-8	1/2	3/4–16	.57	14.48	6	5000	1000
TC-8-S	1/2	3/4–16	.50	12.70	6	5000	1000
TC-8-R	1/2	3/4–16	.63	16.00	6	4500	900
TC-82	–	3/4–18	.69	17.53	6	5000	1000
TC-9	–	3/4–20	.50	12.70	6	5000	1000
CD-10	5/8	7/8–14	.68	17.27	6	5000	1000
CD-101	5/8	7/8–18	.44	11.18	6	5000	1000
TC-111	5/8	7/8–18	.78	19.81	6	5000	1000
TC-100	5/8	7/8–20	.72	18.29	6	4000	800
CD-11	–	1–14	.78	19.81	8	2500	500
TC-120	–	1–20	.78	19.81	8	2000	400
CD-12	3/4	1-1/16–12	.75	19.05	8	2500	500
TC-14	3/4	1-1/16–14	.75	19.05	8	1500	300
TC-15	–	1-1/8–18	.47	11.94	8	2500	500
CD-14	7/8	1-3/16–12	.94	23.88	6	2500	500
TC-17	–	1-1/4–18	.47	11.94	8	2000	400
TC-18	–	1-5/16–12	.88	22.35	8	1000	200
TC-19	–	1-3/8–18	.47	11.94	8	1500	300
CD-18	–	1-1/2–2	.75	19.05	8	1000	200
TC-20	1-1/4	1-5/8–12	.91	23.11	8	750	150
CD-22	–	1-3/4–12	.94	23.88	8	1000	200
TC-21	1-1/2	1-7/8–12	1.00	25.40	8	700	140
CD-400	–	3–12	1.16	29.47	12	250	50





Material: Low-Density Polyethylene **Color*:** Red
Applicable Specs: MIL-C-52078, MIL-C-5501/3R, MIL-C-5501/11, NAS-814, NAS-832

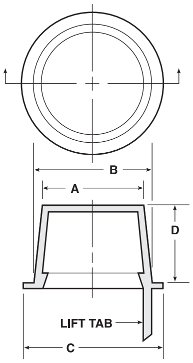
Knurled for ease of application, Series CD Caps seal flared JIC fittings exceptionally well against dirt and moisture, as well as mask during dipping, painting and plating.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Non-Threaded

L SERIES Lift-Tab Tapered Plugs

ISO 9001:2000 Certified
CERTIFICATE # 08-511

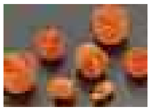


Having the same dimensions as standard Tapered Plugs of like size, Series L Plugs offer the added convenience of an integral lift-tab which facilitates their removal. Since it extends above the plug body, the tab is easy to grasp. This is particularly advantageous with plugs in the smaller sizes and those installed in tight quarters or difficult to reach locations. A bead molded on the tab affords a positive grip. Pulling the tab exerts an off-center force which breaks the seal between plug and wall of opening, permitting instant withdrawal.

Material: Low-Density Polyethylene **Color*:** Red

CPT-NF SERIES Center Pull-Tab Tapered Plugs without Flange

These plugs are ideal for use in tight places or when two or more openings need to be plugged so close together there is no room for a flange. The pull-tab is fully molded into the body of the plug ensuring it will not break off during removal.

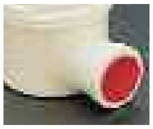


Material: Low-Density Polyethylene **Color*:** Orange

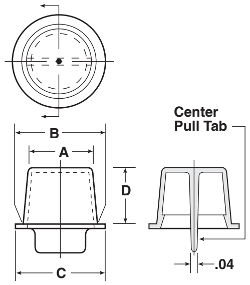
Plugs - Non-Threaded

CPT SERIES Center Pull-Tab Tapered Plugs

Expanded!



Caplug No.	DIMENSIONS								Packaging	
	A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
CPT-0	.209	5.31	.269	6.83	.38	9.65	.34	8.64	5000	1000
CPT-1	.239	6.07	.303	7.70	.47	11.94	.38	9.65	5000	1000
CPT-1X	.267	6.78	.335	8.51	.47	11.94	.41	10.41	5000	1000
CPT-2	.299	7.59	.367	9.32	.50	12.70	.38	9.65	5000	1000
CPT-2X	.331	8.41	.397	10.08	.56	14.22	.38	9.65	5000	1000
CPT-2XW	.330	8.38	.396	10.06	.73	18.54	.38	9.65	5000	1000
CPT-3	.362	9.19	.428	10.87	.56	14.22	.38	9.65	5000	1000
CPT-3X	.392	9.96	.459	11.66	.59	14.99	.41	10.41	5000	1000
CPT-4	.422	10.72	.486	12.34	.62	15.75	.41	10.41	5000	1000
CPT-4X	.465	11.81	.524	13.31	.76	19.30	.41	10.41	5000	1000
CPT-5	.472	11.99	.548	13.92	.69	17.53	.47	11.94	5000	1000
CPT-5X	.500	12.70	.568	14.43	.72	18.29	.47	11.94	5000	1000
CPT-6	.533	13.54	.608	15.44	.75	19.05	.47	11.94	5000	1000
CPT-6W-LT	.549	13.94	.598	15.19	1.00	25.40	.35	8.89	5000	1000
CPT-6X	.550	13.97	.631	16.03	.75	19.05	.50	12.70	5000	1000
CPT-6XW	.580	14.73	.625	15.88	.78	19.81	.22	5.59	5000	1000
CPT-7	.580	14.73	.688	17.48	.84	21.34	.53	13.46	5000	1000
CPT-7X	.610	15.49	.695	17.65	.84	21.34	.53	13.46	5000	1000
CPT-8	.640	16.26	.727	18.47	.88	22.35	.50	12.70	5000	1000
CPT-8X	.678	17.22	.755	19.18	.88	22.35	.53	13.46	5000	1000
CPT-9	.690	17.53	.788	20.02	.94	23.88	.59	14.99	5000	1000
CPT-9Y	.725	18.42	.770	19.56	.86	21.84	.22	5.59	5000	1000
CPT-9X	.727	18.47	.825	20.96	1.00	25.40	.59	14.99	5000	1000
CPT-10	.752	19.10	.849	21.56	1.00	25.40	.59	14.99	5000	1000
CPT-11	.803	20.40	.912	23.16	1.06	26.92	.66	16.76	2500	500
CPT-12L	.869	22.07	.973	24.71	1.12	28.45	.75	19.05	2500	500
CPT-12	.869	22.07	.973	24.71	1.12	28.45	.66	16.76	2500	500
CPT-12X	.915	23.24	1.040	26.42	1.16	29.46	.72	18.29	5000	1000
CPT-13	.967	24.56	1.092	27.74	1.25	31.75	.78	19.81	1500	300
CPT-13S	1.026	26.06	1.146	29.11	1.34	34.04	.75	19.05	1500	300
CPT-14	1.093	27.76	1.219	30.96	1.41	35.81	.78	19.81	1500	300
CPT-14S	1.100	27.94	1.210	30.73	1.34	34.04	.50	12.70	2500	500
CPT-14X	1.150	29.21	1.274	32.36	1.55	39.37	.50	12.70	2000	400
CPT-14Y	1.179	29.95	1.286	32.66	1.44	36.58	.75	19.05	1500	300
CPT-15	1.224	31.09	1.355	34.42	1.50	38.10	.75	19.05	1000	200
CPT-15X	1.235	31.37	1.360	34.54	1.53	38.86	.75	19.05	1000	200
CPT-15S	1.292	32.82	1.356	34.44	1.50	38.10	.78	19.81	1500	300
CPT-16	1.312	33.32	1.465	37.21	1.62	41.15	.75	19.05	1000	200
CPT-16X	1.344	34.14	1.527	38.79	1.75	44.45	.88	22.35	1000	200
CPT-16S	1.360	34.54	1.420	36.07	1.72	43.69	.53	13.46	1500	300
CPT-17	1.451	36.86	1.601	40.67	1.75	44.45	.75	19.05	1000	200
CPT-18	1.563	39.70	1.636	41.55	1.91	48.51	.75	19.05	1000	200
CPT-18X	1.633	41.48	1.750	44.45	1.94	49.28	.78	19.81	1000	200
CPT-19	1.807	45.90	1.784	45.31	1.94	49.28	.50	12.70	1000	200
CPT-19X	1.735	44.07	1.815	46.10	2.81	71.37	.50	12.70	3500	700
CPT-20	1.760	44.70	1.938	49.23	2.16	54.86	1.00	25.40	500	100
CPT-210S	1.820	46.23	1.835	46.61	2.03	51.56	.50	12.70	1000	200
CPT-221	2.067	52.50	2.243	56.97	2.44	61.98	1.03	26.16	350	70
CPT-24S	2.230	56.64	2.270	57.66	2.50	63.50	.50	12.70	1000	200
CPT-240	2.300	58.42	2.464	62.59	2.66	67.56	1.00	25.40	250	50
CPT-250	2.425	61.59	2.632	66.85	2.88	73.15	1.00	25.40	250	50
CPT-44S	2.698	68.53	2.866	72.80	2.97	75.44	.50	12.70	500	100
CPT-500	2.850	72.39	2.982	75.74	3.28	83.31	.75	19.05	250	50
CPT-501	3.320	84.33	3.452	87.68	3.62	91.95	.75	19.05	250	50



Material: Low-Density Polyethylene

Color*: Red

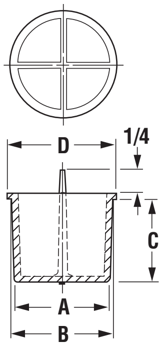
Series CPT Plugs have the same configuration and dimensions of standard Tapered Plugs but with an integral center pull-tab which facilitates insertion and removal of the plug. The tab extends well above the plug body, making it easy to grasp. Since the tab is molded fully into the end and side walls of the plug, it will not break off during plug removal. The concentric design of the CPT allows a straight-pull removal without disturbing O-ring fittings.

IMSG

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Non-Threaded

CT SERIES L- and M-Style Tubing Plugs



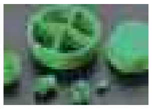
Caplug No.	DIMENSIONS									Packaging	
	Tube O.D.	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
CT 4	3/8	.320	8.13	.330	8.38	.38	9.65	.38	9.65	7500	1500
CT 8	1/2	.420	10.67	.440	11.18	.38	9.65	.50	12.70	7500	1500
CT 12	5/8	.540	13.72	.560	14.22	.50	12.70	.63	16.00	9000	1800
CT 16	3/4	.660	16.76	.690	17.53	.62	15.75	.75	19.05	5000	1000
CT 20	1	.780	19.81	.810	20.57	.75	19.05	.88	22.35	3000	600
CT 24	1-1/8	1.020	25.91	1.050	26.67	.88	22.35	1.13	28.70	1500	300
CT 28	1-3/8	1.260	32.00	1.300	33.02	1.00	25.40	1.38	35.05	1000	200
CT 32	1-5/8	1.500	38.10	1.540	39.12	1.00	25.40	1.63	41.40	700	140
CT 36	2-1/8	1.970	50.04	2.020	51.31	1.00	25.40	2.13	54.10	500	100
CT 40	2-5/8	2.450	62.23	2.500	63.50	1.00	25.40	2.63	66.80	250	50
CT 44	3-1/8	2.930	74.42	2.990	75.95	1.00	25.40	3.13	79.50	200	40
CT 48	3-5/8	3.410	86.61	3.450	87.63	1.00	25.40	3.63	92.20	100	20
CT 52	4-1/8	3.890	98.81	3.930	99.82	1.00	25.40	4.13	104.90	250	50

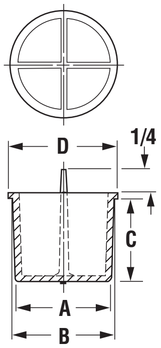
Material: Low-Density Polyethylene **Color*:** Blue

Specifically designed to plug and protect Type L- and M-style tubing. The tapered body with reinforced cross-braces provides exceptional protection for the tube configuration.

OT SERIES Type K-Style

Specifically designed to protect Type K-Style tubing. The tapered body with reinforced cross-braces provides exceptional protection for the tube configuration.



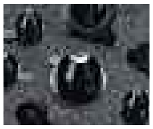


Caplug No.	DIMENSIONS									Packaging	
	Tube O.D.	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
OT 4	3/8	.302	7.67	.312	7.92	.38	9.65	.38	9.65	7500	1500
OT 8	1/2	.394	10.01	.414	10.52	.38	9.65	.50	12.70	7500	1500
OT 12	5/8	.523	13.28	.543	13.79	.50	12.70	.63	16.00	9000	1800
OT 16	3/4	.646	16.41	.676	17.17	.62	15.75	.75	19.05	5000	1000
OT 20	7/8	.740	18.80	.770	19.56	.75	19.05	.88	22.35	3000	600
OT 24	1-1/8	.990	25.15	1.020	25.91	.88	22.35	1.12	28.45	1500	300
OT 28	1-3/8	1.240	31.50	1.280	32.51	1.00	25.40	1.38	35.05	1000	200
OT 32	1-5/8	1.477	37.52	1.517	38.53	1.00	25.40	1.62	41.15	500	100
OT 36	2-1/8	1.960	49.78	2.010	51.05	1.00	25.40	2.13	54.10	500	100
OT 40	2-5/8	2.420	61.47	2.470	62.74	1.00	25.40	2.63	66.80	250	50
OT 44	3-1/8	2.892	73.46	2.952	74.98	1.00	25.40	3.13	79.50	200	40

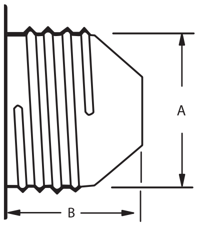
Material: Low-Density Polyethylene **Color*:** Green

Plugs - Non-Threaded

ETV SERIES Flexible Vinyl External Thread Plugs



Caplug No.	DIMENSIONS					Packaging	
	To Plug Thread Size Inches	A		B		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.		
ETV-4	7/16	.438	11.13	.438	11.13	7500	1000
ETV-5	1/2	.500	12.70	.500	12.70	7500	1000
ETV-6	9/16	.563	14.30	.500	12.70	6000	1000
ETV-8	3/4	.750	19.05	.625	15.88	5400	1000
ETV-10	7/8	.875	22.23	.688	17.48	4000	800
ETV-12	1-1/16	1.047	26.59	.750	19.05	2800	560
ETV-16	1-5/16	1.281	32.54	.875	22.23	2000	400

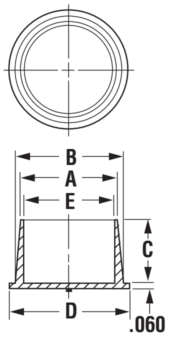


Material: Vinyl **Color*:** Black (80 Durometer)

Series ETV external thread plugs are injection-molded vinyl. These flexible plugs can be easily pushed in and removed with no threading required. External threads hold plugs securely in place. A side-tab has been molded into the plug to facilitate easy removal.

EZP SERIES NPT Plugs

Caplug No.	NPT Thread Size	DIMENSIONS										Packaging	
		A		B		C		D		E		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
EZP 151	1/8	.331	8.41	.397	10.08	.28	7.11	.52	13.21	.27	6.88	25000	5000
EZP 152	1/4	.422	10.72	.486	12.34	.29	7.37	.61	15.49	.36	9.19	20000	4000
EZP 153	3/8	.550	13.97	.640	16.26	.50	12.70	.77	19.56	.49	12.45	7500	1500
EZP 154	1/2	.691	17.55	.787	19.99	.50	12.70	.91	23.11	.62	15.77	5000	1000
EZP 155	3/4	.870	22.10	.974	24.74	.62	15.75	1.09	27.69	.80	20.32	2500	500
EZP 156	1	1.093	27.76	1.219	30.96	.66	16.76	1.34	34.04	1.02	25.98	1500	300
EZP 157	1-1/4	1.450	36.83	1.585	40.26	.75	19.05	1.72	43.69	1.37	34.80	1000	200
EZP 162	1-1/2	1.742	44.25	1.822	46.28	.75	19.05	2.03	51.56	1.66	42.21	500	100
EZP 163	2	2.232	56.69	2.262	57.45	.86	21.84	2.47	62.74	2.15	54.66	500	100



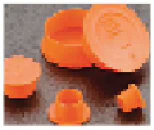
Material: Low-Density Polyethylene **Color:** Orange

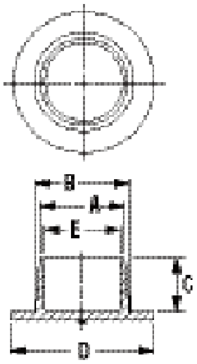
These tapered plugs were designed to cap NPT fittings, but have a universal design ideal for a variety of applications. These durable, multi-use plugs have a flange for easy installation and removal.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Non-Threaded

PZP SERIES Unified Plugs



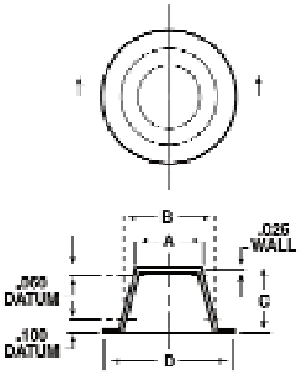


Caplug No.	DIMENSIONS												Packaging	
	Standard Thread Size	Hole Size	A		B		C		D		E		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
PZP 201	–	9/16	.550	13.97	.590	14.99	.50	12.70	.75	19.05	.49	12.45	10000	2000
PZP 100	3/4	–	.658	16.71	.738	18.75	.50	12.70	1.09	27.69	.59	15.09	3500	700
PZP 101	7/8	–	.755	19.18	.870	22.10	.50	12.70	1.19	30.23	.69	17.55	3000	600
PZP 111	1-1/16	–	.940	23.88	1.044	26.52	.62	15.75	1.62	41.15	.88	22.35	1500	300
PZP 202	–	1-1/16	1.040	26.42	1.100	27.94	.62	15.75	1.31	33.27	.97	24.64	2500	500
PZP 104	1-1/4	–	1.188	30.18	1.305	33.15	.69	17.53	1.91	48.51	1.12	28.40	1000	200
PZP 107	1-3/4	–	1.475	37.47	1.636	41.55	.69	17.53	2.27	57.66	1.41	35.69	500	100
PZP 204	–	1-5/8	1.600	40.64	1.660	42.16	.75	19.05	1.88	47.75	1.53	38.86	1000	200
PZP 205	–	1-7/8	1.850	46.99	1.910	48.51	.75	19.05	2.13	54.10	1.78	45.21	500	100

Material: Low-Density Polyethylene **Color*:** Orange

These tapered plugs were designed to protect hydraulic and air-hose fittings, but are versatile enough to fit a variety of applications. The thick flange enables easy installation and removal.

PTP SERIES Tapered Paper Plugs



Caplug No.	DIMENSIONS									Packaging	
	Pipe Size Inches	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
PTP-18-3	1/8	.35	8.89	.42	10.67	.34	8.64	.56	14.22	30000	1000
PTP-14-3	1/4	.46	11.68	.50	12.70	.36	9.14	.68	17.27	18000	1000
PTP-38-3	3/8	.58	14.73	.70	17.78	.48	12.19	.87	22.10	16000	1000
PTP-12-3	1/2	.68	17.27	.82	20.83	.53	13.46	1.04	26.42	10500	1000
PTP-34-3	3/4	.92	23.37	1.11	28.19	.54	13.72	1.38	35.05	6200	1000
PTP-100-3	1	1.18	29.97	1.44	36.58	.64	16.26	1.73	43.94	5000	1000
PTP-114-3	1-1/4	1.50	38.10	1.78	45.21	.69	17.53	2.12	53.85	3000	600
PTP-112-3	1-1/2	1.73	43.94	2.06	52.32	.68	17.27	2.43	61.72	2700	540
PTP-200-3	2	2.22	56.39	2.50	63.50	.64	16.26	2.93	74.42	1800	360
PTP-212-3	2-1/2	2.64	67.06	3.15	80.01	.75	19.05	3.57	90.68	1300	260
PTP-300-3	3	3.28	83.31	3.60	91.44	.74	18.80	4.09	103.89	1000	200

Material: 90 lb. Paperboard **Color:** Brown

Manufactured from natural paper which is 100% recyclable, PTP Series Paper Plugs are the answer for applications requiring "environmentally friendly" components. These closures will withstand intermittent temperatures up to 400°F (204°C), making them ideal for high-temperature applications which may degrade typical plastic plugs. The flexibility and tapered design of the PTP Series allow quick, easy installation and removal.

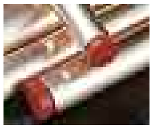
Note: Products are manufactured from paper which is hygroscopic. This means that there may be minor dimensional variation with changes in relative humidity.

Plugs - Non-Threaded

K SERIES Plugs For Round Tubing

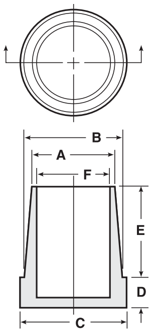
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Expanded!



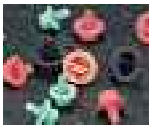
Caplug No.		DIMENSIONS												Packaging	
	Will Plug SAE J-528 Tubing or O.D. Inches	A		B		C		D		E		F		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
K-2.5mm†	-	.160	4.06	.165	4.19	.22	5.59	.12	3.05	.26	6.60	.10	2.64	5000	1000
K-3	3/16	.105	2.67	.138	3.51	.19	4.83	.19	4.83	.31	7.87	.08	1.78	5000	1000
K-3S	3/16	.105	0.27	.138	3.51	.19	4.83	.06	1.52	.31	7.87	.08	1.78	5000	1000
RP-2	3/16	.105	2.67	.140	3.56	.19	4.83	.13	3.30	.25	6.35	-	-	15000	3000
K-4	1/4	.160	4.06	.202	5.13	.24	6.10	.14	3.56	.38	9.65	.14	3.30	5000	1000
RP-3	1/4	.165	4.19	.210	5.33	.25	6.35	.13	3.30	.25	6.35	-	-	35000	7000
K-5	5/16	.227	5.77	.272	6.91	.31	7.87	.14	3.56	.38	9.65	.20	5.08	5000	1000
K-6	3/8	.290	7.37	.340	8.64	.37	9.40	.16	4.06	.38	9.65	.26	6.60	5000	1000
RP-45	3/8	.290	7.37	.330	8.38	.38	9.65	.13	3.30	.54	13.72	-	-	10000	2000
RP-5	3/8	.290	7.37	.345	8.76	.38	9.65	.13	3.30	.50	12.70	-	-	10000	2000
K-8	1/2	.411	10.44	.466	11.84	.50	12.70	.16	4.06	.38	9.65	.38	9.65	5000	1000
K-10	5/8	.530	13.46	.587	14.91	.62	15.75	.19	4.83	.56	14.22	.50	12.70	5000	1000
RP-75	11/16	.550	13.97	.640	16.26	.69	17.53	.13	3.30	.50	12.70	-	-	7500	1500
K-11S	5/8	.530	13.46	.580	14.73	.67	17.02	.37	9.40	.56	14.22	.51	12.95	5000	1000
K-12	3/4	.650	16.51	.712	18.09	.75	19.05	.19	4.83	.56	14.22	.62	15.75	5000	1000
K-12S	-	.609	15.47	.664	16.87	.73	18.54	.38	9.65	.56	14.22	.58	14.73	5000	1000
RP-9	29/32	.734	18.64	.834	21.18	.91	23.11	.13	3.30	.62	15.75	-	-	3500	700

† K-2.5mm is for fiber optic connectors, and also available in Black.



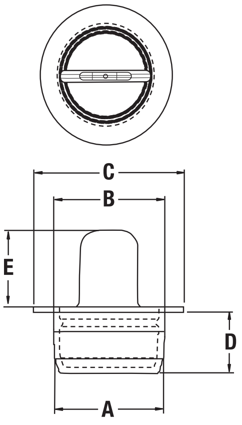
Material: Low-Density Polyethylene **Color*:** Red **Applicable Specs:** MIL-C-5501/8, NAS 843

Series K Tubing Plugs are specially designed for applications where the outside diameter of the closure should not exceed the outside diameter of the tubing. Flanges fit flush with outer walls of tubing, providing positive protection against moisture and dirt. Especially suitable for general purpose, Type K copper tubing, SAE Standard J-528.



ECP SERIES Ergonomic Center Pull-Tab Plug

Caplug No.	Color	DIMENSIONS										Packaging	
		A		B		C		D		E		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
ECP-3/8	Blue	.342	8.67	.35	8.89	.58	14.73	.28	7.11	.40	10.16	5000	1000
ECP-M10	Green	.367	9.33	.38	9.58	.59	15.00	.27	7.00	.39	10.00	5000	1000
ECP-7/16	Yellow	.397	10.08	.41	10.41	.64	16.26	.28	7.11	.40	10.16	5000	1000
ECP-1/2	Natural	.450	11.53	.46	11.68	.67	17.02	.28	7.11	.40	10.16	5000	1000
ECP-M12	Red	.441	11.20	.45	11.45	.67	17.00	.27	7.00	.39	10.00	5000	1000
ECP-M14	Orange	.520	13.20	.53	13.45	.75	19.00	.31	8.00	.39	10.00	5000	1000
ECP-M16	Black	.598	15.20	.61	15.45	.83	21.00	.31	8.00	.39	10.00	5000	1000
ECP-M18	Blue	.663	16.86	.67	17.06	.88	22.40	.34	8.70	.39	10.00	5000	1000
ECP-M20	Red	.748	19.01	.76	19.25	.97	24.60	.35	8.80	.38	9.70	5000	1000
ECP-M22	Yellow	.833	21.18	.84	21.25	1.05	26.70	.39	10.00	.39	10.00	4000	800
ECP-M24	Orange	.888	22.58	.90	22.80	1.10	28.00	.38	9.70	.39	10.00	4000	800
ECP-M27	Black	1.012	25.72	1.03	26.10	1.22	31.10	.46	11.70	.39	10.00	3000	600
ECP-1-1/2	Green	1.420	36.07	1.44	36.58	1.74	44.20	.50	12.70	.40	10.16	2000	400



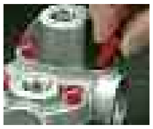
Material: FlexTemp (Thermoplastic Rubber) **Color:** See chart

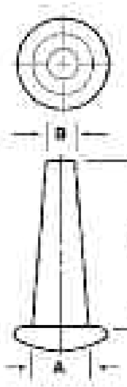
Series ECP plugs offer the convenience of a center pull-tab plug in an ergonomic material. Depending upon port size, ECP series plugs may provide a seal against residual oil leakage during shipment. Since the tab is molded fully into the end and sidewalls of the plug, it does not break off during plug removal. ECP series plugs fit all metric thread pitches for the given diameter and are color-coded for easy size identification.

Plugs - Non-Threaded

TP SERIES Tapered Vinyl Plugs

ISO 9001:2000 Certified
CERTIFICATE # 08-511





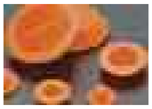
Caplug No.	DIMENSIONS							Packaging		
	Color	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
		in.	mm.	in.	mm.	in.	mm.			
TP-4	Red	.15	3.81	.07	1.78	.625	15.88	5000	1000	50
TP-6	Blue	.20	5.08	.10	2.54	.500	12.70	5000	1000	50
TP-8	Green	.25	6.35	.14	3.56	.750	19.05	5000	1000	50
TP-9	Brown	.30	7.62	.14	3.56	1.000	25.40	5000	1000	50
TP-10	Orange	.31	7.87	.16	4.06	.750	19.05	5000	1000	50
TP-11	Gray	.31	7.87	.19	4.83	1.000	25.40	5000	1000	50
TP-12	Red	.34	8.64	.19	4.83	.750	19.05	5000	1000	50

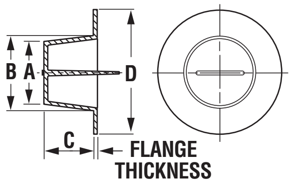
Material: Vinyl **Color:** See chart

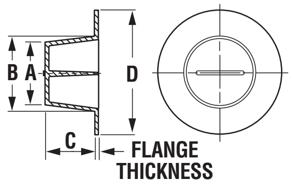
Series TP Vinyl Plugs are designed with a distinct tapered configuration, making them ideal for plugging small holes ranging in diameter from .070" to .343". Flexibility of the vinyl allows these plugs to push in and pull out easily. They are color-coded for ease of size identification.

† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

Extra-Wide Flange Center Pull-Tab







Caplug No.	DIMENSIONS												Packaging	
	NPT/ BSP	Standard	Metric	Hole	A		B		C		D		Carton Quant.	Mini Pak Quant.
					in.	mm.	in.	mm.	in.	mm.	in.	mm.		
662 †	–	9/16	–	1/2	.480	12.19	.540	13.72	.53	13.46	1.25	31.75	5000	1000
242-WP	–	11/16	M18x1.5	5/8	.590	14.99	.647	16.43	.50	12.70	1.06	26.92	5000	1000
663 †	1/2	–	–	3/4	.730	18.54	.790	20.07	.50	12.70	1.50	38.10	3000	600
246-WP	–	7/8	M24	–	.752	19.10	.849	21.56	.50	12.70	1.31	33.27	2500	500
664 †	3/4	–	–	1	.980	24.89	1.040	26.42	.53	13.46	1.88	47.75	1500	300
248-WP	–	1-1/16	M27x2	–	.921	23.39	1.075	27.31	.75	19.05	1.62	41.15	1500	300
153-2-WP	–	–	–	–	1.069	27.15	1.188	30.18	.69	17.53	1.73	43.94	1000	200
250-WP	–	1-15/16	M33x2/M36	–	1.202	30.53	1.297	32.94	.75	19.05	1.88	47.75	1000	200
665 †	–	–	–	1-1/4	1.230	31.24	1.290	32.77	.50	12.70	2.00	50.80	1200	240
666 †	–	–	–	1-1/2	1.460	37.08	1.550	39.37	.75	19.05	2.38	60.45	500	100
194-WP	1-1/4	1-5/8	–	–	1.519	38.58	1.602	40.69	.75	19.05	2.25	57.15	500	100
196-3-WP	–	–	–	–	1.807	45.90	1.932	49.07	.75	19.05	2.53	64.26	500	100
667 †	2	–	–	2	1.960	49.78	2.050	52.07	.75	19.05	2.75	69.85	500	100
668 †	–	–	–	2-1/2	2.460	62.48	2.550	64.77	.75	19.05	3.25	82.55	250	50

Material: Low-Density Polyethylene **Color:** Orange

This tapered plug features a center pull-tab design that extends above the flange for easy removal. The extra-wide flange protects more surface area, preventing improper installation.

†660 Series have a tab flush with flange (see drawing)

Note: "B" dimension should be at least .02" more than diameter to be plugged.
Larger diameters may require more interference.

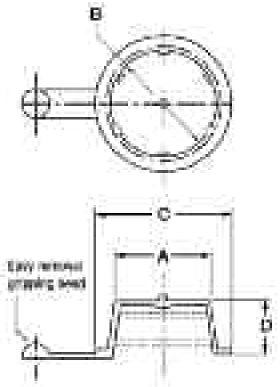
Plugs - Non-Threaded

SPT SERIES Plugs For Round Tubing

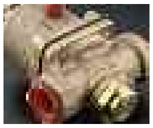
Caplug No.	DIMENSIONS										Packaging	
	To Fit Thread Size	Color	A		B		C		D		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.	in.	mm.		
SPT-6	3/8–18 NPT	Blue	.546	13.89	.64	16.38	.78	19.81	.28	7.11	12000	1000
SPT-8	3/4–18 UN	Yellow	.637	16.18	.75	19.23	.86	21.84	.24	6.10	12000	1000
SPT-9	1/2–14 NPT	Green	.691	17.55	.79	20.29	.86	21.84	.24	6.10	12000	1000

Material: Low-Density Polyethylene **Color*:** See chart

These side pull-tab plugs were designed for quick and easy removal. These shallow plugs with small flanges are ideal for plugging open ports in areas with limited space. The pull-tab is molded with a small bead to enable easy gripping and removal. These plugs are color coded for your convenience.



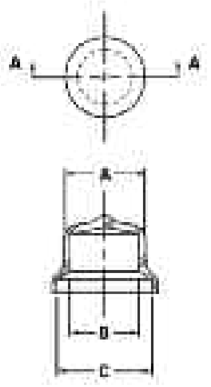
VTP SERIES Flexible Vinyl Tapered Plugs



Caplug No.	DIMENSIONS								Packaging		
	To Fit Thread Size		A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	NPT	STD	in.	mm.	in.	mm.	in.	mm.			
VTP-05	-	1/4	.195	4.95	.125	3.18	.300	7.62	5000	1000	100
VTP-1	-	5/16	.290	7.37	.210	5.33	.406	10.31	5000	1000	100
VTP-2	1/8	3/8	.400	10.16	.290	7.37	.437	11.10	5000	1000	100
VTP-25	-	7/16	.445	11.30	.340	8.64	.500	12.70	5000	1000	100
VTP-3	1/4	1/2	.530	13.46	.365	9.27	.555	14.10	5000	1000	100
VTP-35	-	9/16	.570	14.48	.445	11.30	.625	15.88	2500	500	50
VTP-4	3/8	5/8	.640	16.26	.520	13.21	.750	19.05	2500	500	50
VTP-5	1/2	3/4	.800	20.32	.682	17.32	.937	23.80	2500	500	50
VTP-55	3/4	7/8	.870	22.10	.732	18.59	1.000	25.40	1000	200	25
VTP-6	3/4	1-1/16	1.025	28.04	.891	22.63	1.188	30.18	1000	200	25
VTP-7	1	1-3/16, 1-1/4, 1-5/16	1.275	32.39	1.147	29.13	1.453	36.91	1000	200	25

Material: Vinyl **Color:** Red **Optional Colors:** White, Brown, Orange, Green, Gray, Blue, Yellow

Series VTP Vinyl Plugs provide a snug fit when pushed into open ports, ensuring a tight closure that will not pop out accidentally during processing or shipping. A simple tug on the flanged lip of an installed VTP breaks the seal for easy removal. The plugs are molded from a specially formulated, non-shredding vinyl that offers an attractive, high-gloss finish to products.

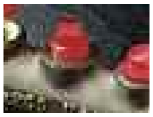


† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Threaded

P SERIES Plastic Threaded Plugs for Pipe Fittings

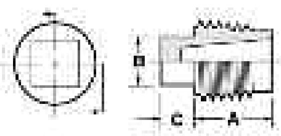


Caplug No.	DIMENSIONS							Packaging	
	To Fit Thread Size	A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
P-18	1/8 NPT	.44	11.18	.28	7.11	.25	6.35	5000	1000
P-28	1/4 NPT	.50	12.70	.37	9.40	.25	6.35	5000	1000
P-38	3/8 NPT	.56	14.22	.44	11.18	.25	6.35	5000	1000
P-48	1/2 NPT	.59	14.99	.56	14.22	.25	6.35	2500	500
P-108	1-1/4 NPT	.75	19.05	.75	19.05	.25	6.35	800	160
P-128	1-1/2 NPT	.97	24.64	1.25	31.75	.38	9.65	700	140
P-68H	3/4 NPT	.62	15.75	.62	15.75	.25	6.35	1000	200
P-88H	1 NPT	.72	18.29	.81	20.57	.31	7.87	1000	200
P-68V	3/4 NPT	.62	15.75	.50	12.70	-	-	1000	200
P-68VH	3/4 NPT	.50	12.70	.31	7.87	-	-	2500	500
P-18B	1/8 NPT	.56	14.22	.27	6.85	.58	14.73	5000	1000
P-28B	1/4 NPT	.74	18.80	.37	9.39	.68	17.27	5000	1000
P-38B	3/8 NPT	.83	21.08	.33	8.38	.71	10.03	2500	500
P-48B	1/2 NPT	1.04	26.42	.55	13.97	.92	23.37	1000	200
P-68B	3/4 NPT	1.31	33.28	.63	16.00	1.04	26.42	1000	200
P-48C	1/2 -14 NPT	1.04	26.41	.50	12.70	.94	23.87	3000	600

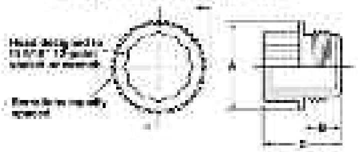
Material: High-Density Polyethylene **Color*:** Red
Applicable Specs: MIL-C-52078, MIL-C-5501/5, NAS 840

Series P Pipe Plugs are available in six different styles. They are molded in high-density polyethylene and are ideal for keeping moisture, dirt and other contaminants from NPT-threaded ports.

Tapered Thread
Caplugs Nos. P-18 thru P-128

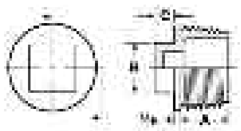


Straight Thread
Caplugs Nos. P-18B thru P-68B

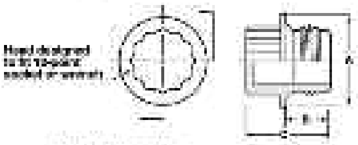

Head designed to fit 5/8" 12-point socket or wrench
Serrations equally spaced
A
B
C

This style is available for optional gasketing. Contact customer service for prices.

Tapered Thread
Caplugs Nos. P-68H and P-88H

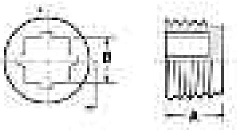


Straight Thread
Caplugs No. P-48C

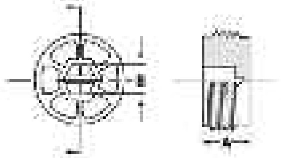


Material: Polypropylene
Color*: Red

Tapered Thread
Caplugs No. P-68V



Straight Thread
Caplugs No. P-68VH



ISO 9001:2000 Certified
CERTIFICATE # 08-511

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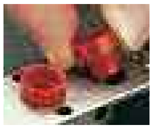
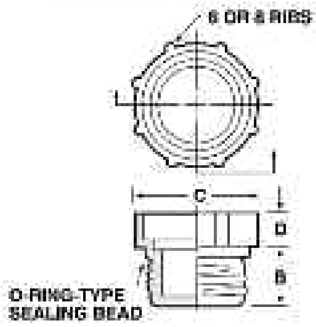
CERTIFICATE # 08-511

Plugs - Threaded

PDO SERIES Plastic Threaded Plugs for SAE O-Ring Ports



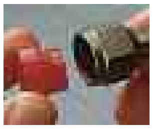
Caplug No.	DIMENSIONS							Packaging	
	To Fit Thread Size Inches	B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
PDO-104	7/16–20	.32	8.13	.65	16.51	.38	9.65	5000	1000
PDO-105	1/2–20	.32	8.13	.72	18.29	.38	9.65	5000	1000
PDO-106	9/16–18	.36	9.14	.78	19.81	.38	9.65	5000	1000
PDO-108	3/4–16	.40	10.16	.98	24.89	.38	9.65	2500	500
PDO-110	7/8–14	.45	11.43	1.11	28.20	.38	9.65	2500	500
PDO-112	1-1/16–12	.62	15.75	1.31	33.27	.38	9.65	2500	500
PDO-116	1-5/16–12	.62	15.75	1.56	39.63	.38	9.65	1000	200
PDO-120	1-5/8–12	.62	15.75	1.88	47.75	.38	9.65	1000	200



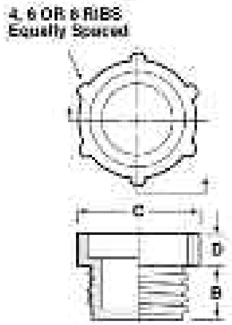
Material: High-Density Polyethylene **Color:** Red

Series PDO Plugs provide positive sealing for SAE straight-threaded O-ring-type ports and MIL-MS-33649 bosses on fluid power components. Integral O-ring-type bead seals in the bevel of the port to prevent oil leakage or entrance of contaminants. Seal at outside of knurl protects port face against paint and dirt.

PDI SERIES Threaded Plastic Plugs for Inverted Flared Fittings



Caplug No.	DIMENSIONS							Packaging	
	To Fit Thread Size Inches	B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
PDI-21	5/16–28	.22	5.59	.44	11.20	.19	4.83	5000	1000
PDI-31	3/8–24	.25	6.35	.50	12.70	.19	4.83	5000	1000
PDI-41	7/16–24	.27	6.86	.63	16.00	.19	4.83	5000	1000
PDI-51	1/2–20	.28	7.11	.69	17.50	.25	6.35	5000	1000
PDI-66	5/8–18	.31	7.87	.81	20.60	.25	6.35	5000	1000
PDI-67	5/8–18	.50	12.70	.81	20.60	.25	6.35	5000	1000
PDI-69	11/16–18	.31	7.87	.87	22.10	.25	6.35	5000	1000
PDI-81	3/4–18	.38	9.65	.87	22.10	.25	6.35	5000	1000
PDI-122	1-1/16–16	.43	10.92	1.19	30.20	.25	6.35	2500	500

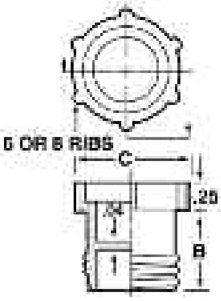


Material: High-Density Polyethylene **Color*:** Red

Series PDI Plugs are made for use on inverted flared fittings. Knurled for ease of application, they will seal with light finger tightening. Series PDI Plugs will seal boss type fittings without gaskets.

PDE SERIES Plastic Threaded Plugs for Flareless Tube and Nut Assemblies

Caplug No.	DIMENSIONS					Packaging	
	To Fit Thread Size Inches	B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.		
PDE-3	3/8–24	.35	8.89	.56	12.70	5000	1000
PDE-4	7/16–20	.40	10.16	.56	14.22	5000	1000
PDE-5	1/2–20	.46	11.68	.63	16.00	5000	1000
PDE-6 (PDF-40)	9/16–18	.48	12.19	.68	17.27	5000	1000
PDE-8	3/4–16	.54	13.72	.87	22.10	5000	1000
PDE-10	7/8–14	.62	15.75	1.00	25.40	2500	500
PDE-12	1-1/16–12	.64	16.26	1.25	31.75	1000	200
PDE-16	1-5/16–12	.72	18.29	1.50	38.10	1000	200



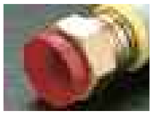
Material: High-Density Polyethylene **Color*:** Red

Knurled for ease of application, Series PDE Plugs are designed to fit MS-21921 tube and nut assemblies interchangeably. They can be installed with light finger tightening to seal beyond normal requirements.

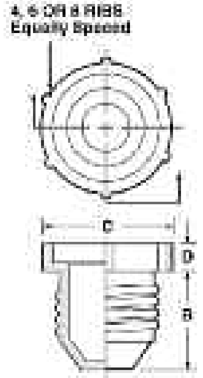
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Threaded

PD SERIES Threaded Plastic Plugs for Flared JIC Fittings



Caplug No.	DIMENSIONS								Packaging	
	To Plug Nominal Tubing Size - Inches	To Fit Thread Size - Inches	B		C		D		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.		
PD-20 (LDPE)	1/8	5/16 – 24	.44	11.20	.44	11.18	.18	4.57	5000	1000
PD-30 (LDPE)	3/16	3/8 – 24	.46	11.70	.50	12.70	.18	4.57	5000	1000
PD-30 (HDPE)	3/16	3/8 – 24	.46	11.70	.50	12.70	.18	4.57	5000	1000
PD-40 (LDPE)	1/4	7/16 – 20	.53	13.50	.62	15.75	.19	4.83	5000	1000
PD-40 (HDPE)	1/4	7/16 – 20	.53	13.50	.62	15.75	.19	4.83	5000	1000
PD-50 (LDPE)	5/16	1/2 – 20	.53	13.50	.68	17.27	.25	6.35	5000	1000
PD-50 (HDPE)	5/16	1/2 – 20	.53	13.50	.68	17.27	.25	6.35	5000	1000
PD-60 (LDPE)	3/8	9/16 – 18	.50	12.70	.81	20.57	.25	6.35	5000	1000
PD-60 (HDPE)	3/8	9/16 – 18	.50	12.70	.81	20.57	.25	6.35	5000	1000
PD-65 (LDPE)	3/8	5/8 – 18	.59	15.00	.81	20.57	.25	6.35	5000	1000
PD-65 (HDPE)	3/8	5/8 – 18	.59	15.00	.81	20.57	.25	6.35	5000	1000
PD-80 (LDPE)	1/2	3/4 – 16	.75	19.10	.94	23.88	.25	6.35	2500	500
PD-80 (HDPE)	1/2	3/4 – 16	.75	19.10	.94	23.88	.25	6.35	2500	500
PD-100 (LDPE)	5/8	7/8 – 14	.87	22.10	1.06	26.93	.25	6.35	2500	500
PD-100 (HDPE)	5/8	7/8 – 15	.87	22.10	1.06	26.93	.25	6.35	2500	500
HF 16 (LDPE)	3/4	1-1/16 – 12	.86	21.80	1.41	35.81	.25	6.35	1500	300
HF 16 (HDPE)	3/4	1-1/16 – 12	.86	21.80	1.41	35.81	.25	6.35	1500	300
PD-121 (LDPE)	3/4	1-1/16 – 14	1.12	28.50	1.31	33.28	.25	6.35	1000	200
PD-121 (HDPE)	3/4	1-1/16 – 14	1.12	28.50	1.31	33.28	.25	6.35	1000	200
HF 17 (LDPE)	3/4	1-1/16 – 14	.86	21.80	1.41	35.81	.25	6.35	1500	300
HF 17 (HDPE)	3/4	1-1/16 – 14	.86	21.80	1.41	35.81	.25	6.35	1500	300
HF 18 (LDPE)	7/8	1-3/16 – 12	.93	23.60	1.50	38.10	.25	6.35	1200	240
HF 18 (HDPE)	7/8	1-3/16 – 12	.93	23.60	1.50	38.10	.25	6.35	1200	240
PD-160 (LDPE)	1	1-5/16 – 12	.93	23.60	1.50	38.10	.25	6.35	1000	200
PD-160 (HDPE)	1	1-5/16 – 12	.93	23.60	1.50	38.10	.25	6.35	1000	200
PD-180 (LDPE)	-	1-1/2 – 12	.93	23.60	1.75	44.45	.25	6.35	1000	200
PD-180 (HDPE)	-	1-1/2 – 12	.93	23.60	1.75	44.45	.25	6.35	1000	200
HF 24 (LDPE)	1-1/4	1-5/8 – 12	.94	23.90	2.22	56.39	.34	8.64	500	100
HF 24 (HDPE)	1-1/4	1-5/8 – 12	.94	23.90	2.22	56.39	.34	8.64	500	100
HF 26 (LDPE)	-	1-3/4 – 12	.97	24.60	2.31	58.97	.34	8.64	500	100
HF 26 (HDPE)	-	1-3/4 – 12	.97	24.60	2.31	58.97	.34	8.64	500	100
PD-240 (LDPE)	1-1/2	1-7/8 – 12	1.15	29.20	2.31	58.68	.31	7.87	500	100
PD-240 (HDPE)	1-1/2	1-7/8 – 12	1.15	29.20	2.31	58.68	.31	7.87	500	100
HF 28 (LDPE)	1-1/2	1-7/8 – 12	1.06	26.90	2.47	62.74	.38	9.65	500	100
HF 28 (HDPE)	1-1/2	1-7/8 – 12	1.06	26.90	2.47	62.74	.38	9.65	500	100
HF 30 (LDPE)	1-3/4	2-1/4 – 12	1.31	33.30	2.75	69.85	.38	9.65	250	50
HF 30 (HDPE)	1-3/4	2-1/4 – 12	1.31	33.30	2.75	69.85	.38	9.65	250	50
HF 32 (LDPE)	2	2-1/2 – 12	1.31	33.30	3.09	78.49	.38	9.65	225	45
HF 32 (HDPE)	2	2-1/2 – 12	1.31	33.30	3.09	78.49	.38	9.65	225	45

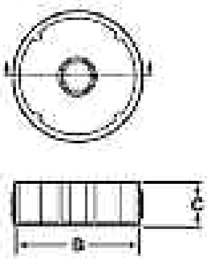


Material: High-Density Polyethylene
Color*: Red
Applicable Specs:
MIL-C-52078,
MIL-C-5501/1, NAS 833

Series PD Plugs, designed for use on flared JIC fittings, are knurled for ease of application. They will seal low-pressure requirements with light finger tightening. PD Plugs can be used to seal 37° flare fittings without gaskets.

PDH SERIES Threaded Plastic Plugs for Flat-Faced O-Ring Hydraulic Fittings

Caplug No.	DIMENSIONS					Packaging	
	To Fit Thread Size Inches	B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.		
PDH-1 3/16-12	1-3/16–12	1.060	26.92	1.00	25.40	500	100
PDH-1 3/8-12	1-3/8–12	1.245	31.62	1.00	25.40	500	100
PDH-1 3/4-12	1-3/4–12	1.640	41.66	1.00	25.40	500	100
PDH-2-12	2–12	1.878	47.70	1.00	25.40	500	100
PDH-2 5/16-12	2-5/16–12	2.190	55.63	1.00	25.40	250	50
PDH-3 1/16-12	3-1/16–12	2.930	74.42	1.00	25.40	250	50

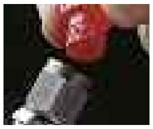


Material: High-Density Polyethylene
Color: Red

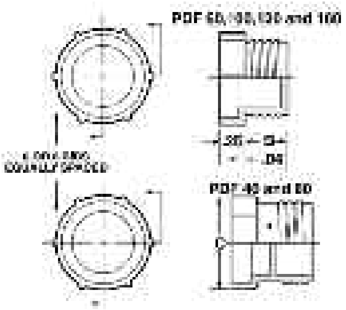
Series PDH Plugs are designed for flat-faced O-ring hydraulic fittings and can be easily installed and removed with an Allen Wrench. Series PDH offers a universal design with standard thread pitches, and seals flush against an O-ring.

Plugs - Threaded

PDF SERIES Threaded Plastic Plugs for Flat-Faced O-Ring Hydraulic Fittings



Caplug No.	DIMENSIONS						Packaging	
	To Plug Nominal Tubing Size - Inches	To Fit Thread Size	B		C		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.		
PDE-6 (PDF-40)	1/4	9/16–18	.48	12.19	.68	17.27	5000	1000
PDF-60	3/8	11/16–16	.44	11.18	.87	22.10	5000	1000
PDF-80	1/2	13/16–16	.50	12.70	.94	23.88	5000	1000
PDF-100	5/8	1–14	.59	14.99	1.16	29.47	2500	500
PDF-120	3/4	1-3/16–12	.63	16.00	1.33	33.78	2500	500
PDF-160	1	1-7/16–12	.75	19.05	1.63	41.40	1000	200

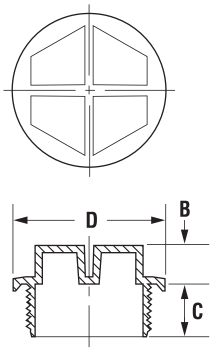


Material: Low-Density Polyethylene **Color*:** Red

Series PDF Plugs are designed for easy mechanical or hand installation on flat-faced O-ring fittings.

MT SERIES Metric Sealing Plugs

Caplug No.	DIMENSIONS				Packaging	
	To Fit Metric Thread Size	B	C	D	Carton Quant.	Mini Pak Quant.
		mm.	mm.	mm.		
MT 10	M10 X 1	9.91	7.11	14.22	10000	2000
MT 12	M12 X 1.5	9.91	9.91	17.27	8000	1600
MT 14	M14 X 1.5	9.91	9.91	19.30	6000	1200
MT 16	M16 X 1.5	9.91	9.91	22.10	4500	900
MT 18	M18 X 1.5	10.92	9.91	23.88	4000	800
MT 20	M20 X 1.5	13.97	9.91	25.91	2800	560
MT 22	M22 X 1.5	13.97	9.91	27.18	2500	500
MT 24	M22 X 1.5	13.97	12.00	31.50	2200	440
MT 26	M26 X 1.5	13.97	9.91	32.00	1700	340
MT 27	M27 X 2	13.97	12.95	32.26	1500	300
MT 33	M33 X 2	13.97	12.95	40.39	900	180



Material: Nylon 6 **Color*:** Yellow

Designed to protect metric fittings, this plug is engineered with five complete threads to provide a tight fit. The "sealing lip" enables each plug to provide a secure seal. The MT series can be applied or removed with a screwdriver, socket wrench, power tool, or manually.

IMSG
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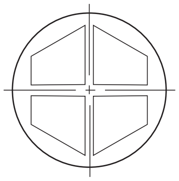
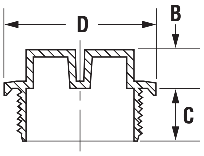
CERTIFICATE # 08-511

Plugs - Threaded

BT SERIES BSP Sealing Plugs

Caplug No.	To Plug BSP Thread Size	B		C		D		Packaging	
		in.	mm.	in.	mm.	in.	mm.	Carton Quant.	Mini Pak Quant.
BT 0250	G 1/4	.39	9.91	.35	8.89	.76	19.30	7000	1400
BT 0375	G 3/8	.43	10.92	.35	8.89	.87	22.10	4000	800
BT 0500	G 1/2	.51	12.95	.47	11.94	1.07	27.18	2500	500
BT 0750	G 3/4	.51	12.95	.47	11.94	1.27	32.26	1600	320
BT 1000	G 1	.55	13.97	.59	14.99	1.57	39.88	900	180
BT 1250	G 1-1/4	.59	14.99	.59	14.99	1.98	50.29	550	110
BT 1500	G 1-1/2	.59	14.99	.59	14.99	2.18	55.37	450	90
BT 2000	G 2	.59	14.99	.59	14.99	2.69	68.33	250	50

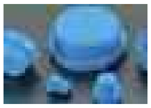




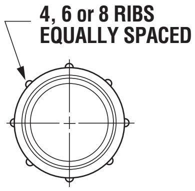
Material: Nylon 6 **Color:** Yellow

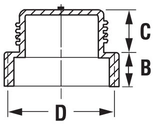
The BT series is designed to protect British Standard Pipe fittings. This plug is engineered with five complete threads to provide a tight fit. The “sealing lip” enables each plug to provide a secure seal. The BT series can be applied or removed with a screwdriver, socket wrench, power tool or manually.

DPN SERIES Threaded (UN and UNS) Plugs



Caplug No.	To Fit Tube Size	To Fit Thread Size	B		C		D		Packaging	
			in.	mm.	in.	mm.	in.	mm.	Carton Quant.	Mini Pak Quant.
DPN 3	3/16	3/8–28	.25	6.35	.28	7.11	.44	11.18	10000	2000
DPN 4	1/4	7/16–24	.31	7.87	.30	7.62	.56	14.22	7000	1400
DPN 5	5/16	1/2–24	.31	7.87	.30	7.62	.62	15.75	10000	2000
DPN 6	3/8	9/16–20	.31	7.87	.32	8.13	.69	17.53	10000	2000
DPN 8	1/2	23/32–20	.31	7.87	.32	8.13	.88	22.35	5000	1000
DPN 10	5/8	27/32–18	.31	7.87	.40	10.16	1.00	25.40	3500	700
DPN 12	3/4	1-16	.31	7.87	.42	10.67	1.12	28.45	2500	500
DPN 14	7/8	1-1/8–16	.25	6.35	.45	11.43	1.25	31.75	2500	500
DPN 16	1	1-1/4–14	.25	6.35	.45	11.43	1.38	35.05	2000	400
DPN 20	1-1/4	1-33/64–14	.25	6.35	.45	11.43	1.62	41.15	1000	200
DPN 21S	1-1/4	1-37/64–14	.25	6.35	.46	11.68	1.75	44.45	1000	200
DPN 24	1-1/2	1-25/32–14	.25	6.35	.55	13.97	2.00	50.80	1000	200
DPN 25S	1-1/2	1-27/32–14	.25	6.35	.55	13.97	2.12	53.85	1000	200





Material: High-Density Polyethylene **Color:** Blue

Originally these plugs were engineered for use in aircraft and hydraulic equipment. They provide protection against contaminants while protecting delicate threads. The rolled thread design allows them to be threaded in or simply pushed in. These threads were also designed to conform to UN and UNS specifications.

IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

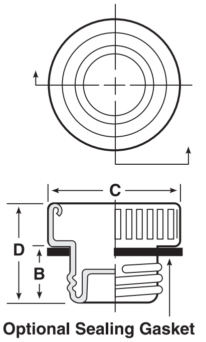
Plugs - Threaded

ADP SERIES Threaded Aluminum Plugs For Flareless Tube And Hose Assemblies

Caplug No.	DIMENSIONS								Packaging	
	To Fit Tube Size	To Fit Thread Size	B		C		D		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.		
ADP-2	5/32	5/16–24	.34	8.64	.47	11.94	.52	13.21	5500	1000
ADP-3	3/16	3/8–24	.28	7.11	.57	14.48	.52	13.21	5000	1000
ADP-4	1/4	7/16–20	.29	7.37	.61	15.49	.54	13.72	7000	1000
ADP-5	5/16	1/2–20	.32	8.13	.70	17.78	.55	13.97	5500	1000
ADP-6	3/8	9/16–18	.33	8.38	.76	19.30	.60	15.24	4000	1000
ADP-7	3/8	5/8–18	.31	7.87	.90	22.86	.59	14.99	5000	1000
ADP-8	1/2	3/4–16	.43	10.92	.94	23.88	.72	18.29	4700	800
ADP-10	5/8	7/8–14	.49	12.45	1.11	28.20	.74	18.80	3500	500
ADP-12	3/4	1-1/16–12	.47	11.94	1.38	35.05	.81	20.57	1900	500
ADP-16	1	1-5/16–12	.45	11.43	1.53	38.86	.82	20.83	1200	200
ADP-24	1-1/2	1-7/8–12	.63	16.00	2.52	64.01	.93	23.62	500	100

Material: 3003-0 Aluminum Alloy **Color:** Natural (Silver) **Applicable Specs:** MIL-C-5501/2, NAS-842

Series ADP Plugs have a dimpled nose section that forms a low-pressure seal with flareless tube ends. The addition of a neoprene shoulder gasket enables the ADP-GN to provide a positive seal on the spot-face of the O-ring port. Special gaskets are also available in Butyl or Buna N rubber.



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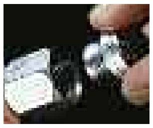
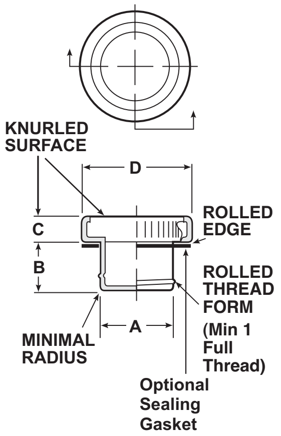
AFO SERIES Threaded Aluminum Plugs For Flat-Faced O-Ring Hydraulic Fittings



Caplug No.	DIMENSIONS									Packaging	
	To Fit Thread Size	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
AFO-60	11/16–16	.607	15.42	.48	12.20	.29	7.37	.94	23.88	4500	1000
AFO-80	13/16–16	.730	18.54	.53	13.50	.29	7.37	1.11	28.20	3200	400
AFO-100	1–14	.907	23.04	.63	16.00	.31	7.87	1.38	35.05	1700	300
AFO-120	1-3/16–12	1.080	27.43	.70	17.80	.31	7.87	1.38	35.05	1400	300
AFO-160	1-7/16–12	1.330	33.78	.70	17.80	.43	10.92	2.00	50.80	650	100
AFO-180	1-11/16–12	1.582	40.17	.89	22.60	.35	8.89	2.31	58.65	500	100

Material: 3003-0 Aluminum Alloy **Color:** Natural (Silver)

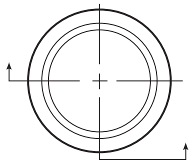
Series AFO Plugs are designed for positive, metal-to-metal threaded protection of fluid lines and fittings. Available with optional neoprene gaskets. Special gaskets are also available in Butyl or Buna N rubber.

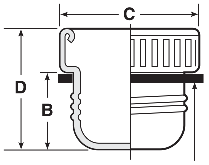


Plugs - Threaded

ASP SERIES Threaded Aluminum Plugs for 37˚ Flared Fittings and Straight-Threaded Ports

Caplug No.	DIMENSIONS							Packaging	
	To Fit Thread Size	B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
ASP-3	3/8–24	.37	9.40	.57	14.48	.61	15.49	4500	1000
ASP-4	7/16–20	.46	11.70	.61	15.49	.71	18.03	5000	1000
ASP-5	1/2–20	.47	11.90	.70	17.78	.70	17.78	5000	1000
ASP-6	9/16–18	.50	12.70	.76	19.30	.77	19.56	5000	1000
ASP-7	5/8–18	.50	12.70	.90	22.86	.78	19.81	5000	1000
ASP-8	3/4–16	.61	15.50	.94	23.88	.90	22.86	4000	800
ASP-10	7/8–14	.70	17.80	1.11	28.20	.95	24.13	3000	500
ASP-12	1-1/16–12	.65	16.50	1.38	35.05	.99	25.15	1700	500
ASP-16	1-5/16–12	.71	18.00	1.53	38.86	1.08	27.43	1150	200
ASP-24	1-7/8–12	.88	22.40	2.50	63.50	1.24	31.50	400	80



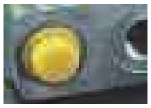


Optional Sealing Gasket

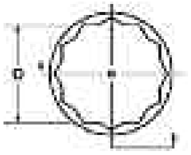
Material: 3003-0 Aluminum Alloy **Color:** Natural (Silver)
Applicable Specs: MIL-C-5501/1, NAS-818, NAS-836

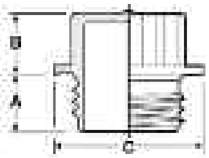
Designed for protection of 37° flared fittings and straight-threaded ports, Series ASP Plug has a nose section that seals on flared fittings without a gasket. The ASP-GN has an added neoprene shoulder gasket for low-pressure sealing of threaded ports. Special gaskets are also available in Butyl or Buna N rubber.

BSP SERIES Plastic Threaded Plugs For British Standard Pipe Fittings



Caplug No.	DIMENSIONS								Packaging	
	To Fit Thread Size	A		B		C		12-Point Socket Size D	Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.			
BSP-1/4	G 1/4	.36	9.14	.33	8.38	.728	18.49	11	5000	1000
BSP-3/8	G 3/8	.36	9.14	.33	8.38	.886	22.51	14	4000	800
BSP-1/2	G 1/2	.43	10.92	.44	11.18	1.043	26.49	18	2000	400
BSP-3/4	G 3/4	.43	10.92	.44	11.18	1.339	33.78	24	2000	400





Material: Polypropylene **Color*:** Yellow

Series BSP Plugs provide positive protective sealing on ports threaded for British Standard Pipe fittings. A unique flange compression seal prevents leakage of residual fluid. Designed for easy finger installation, a 12-point head enables socket or wrench tightening for a positive seal.

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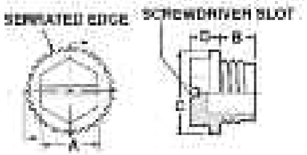
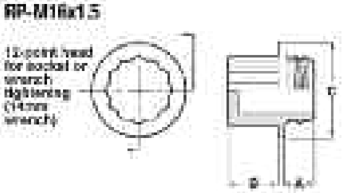
Plugs - Threaded

RP SERIES Threaded Plugs

Expanded!

Caplug No.	DIMENSIONS									Packaging	
	To Plug Thread Size	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
RP-7-14	7/16–14	.43	10.92	.30	7.62	.62	15.75	.28	7.11	5000	1000
TF 7-1	7/16–20	---	---	.30	7.62	.68	17.27	.19	4.83	5000	1000
RP-8-13	1/2–13	.49	12.57	.32	8.13	.69	17.53	.26	6.60	5000	1000
TF 8	1/2–20	---	---	.36	9.14	.74	18.80	.19	4.83	4500	900
TF 9	9/16–18	---	---	.35	8.89	.81	20.57	.19	4.83	3500	700
TF 10	5/8–18	---	---	.34	8.64	.74	18.80	.17	4.32	7500	1500
TF 12-2	3/4–16	---	---	.44	11.18	1.03	26.16	.19	4.83	5000	1000
TF 12	3/4–16	---	---	.44	11.18	.89	22.61	.18	4.57	5000	1000
TF 14-3	7/8–14	---	---	.50	12.70	1.18	29.97	.19	4.83	2500	500
TF 14	7/8–14	---	---	.50	12.70	1.02	25.91	.24	6.10	2500	500
TF 17-2	1-1/16–12	---	---	.62	15.75	1.47	37.34	.19	4.83	1500	300
TF 21-1	1-5/16–12	---	---	.88	22.35	1.56	39.62	.25	6.35	1000	200
TF 26	1-5/8–12	---	---	1.00	25.40	2.00	50.80	.25	6.35	700	140
TF 30	1-7/8–12	---	---	1.00	25.40	2.25	57.15	.25	6.35	500	100
RP-M16x1.5**	16mm x 1.5mm	.28	7.11	.52	13.21	.89	22.61	—	—	4000	800





Material: Polypropylene **Color:** Red, RP-M** White
Applicable Specs: MIL-C-52078, MIL-C-5501/2, MIL-C-5501/10, NAS 838

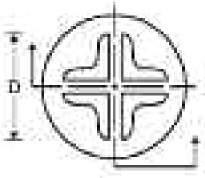
Originated for automotive and air conditioning tube fittings, Series RP is a generalpurpose, high-strength, machine thread plug adaptable to a multitude of applications. Serrated for finger tightening, they also have a slotted hex-head for screwdriver, nutdriver or wrench installation where desired.

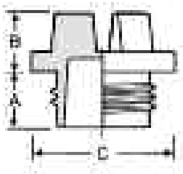
MSP SERIES Slotted-Head Plastic Plugs For Metric-Threaded Ports

Caplug No.	DIMENSIONS									Packaging	
	To Plug Thread Size	A		B		C		D		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.	in.	mm.		
MSP-14x1.5	14mm x 1.5mm	.33	8.30	.32	8.20	.86	21.80	.59	15.00	4000	800
MSP-16x1.5	16mm x 1.5mm	.33	8.50	.24	9.00	.86	21.80	.63	16.00	4000	800

Material: High-Density Polyethylene **Color*:** Green

Series MSP Plugs feature two concentric, raised rings on the underside of the flange to provide positive sealing around metric-threaded ports. A cross-slotted head makes it easy to tighten with a screwdriver.





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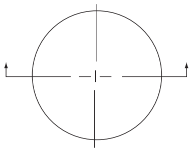
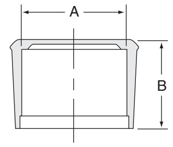
Plugs - Finishing

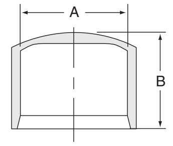
COF SERIES Caps for Round Tubing and Rods

Caplug No.	DIMENSIONS				Packaging	
	A		B		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.		
COF-1/4	.250	6.35	.46	12.00	10000	1000
COF-3/8	.375	9.53	.46	12.00	10000	1000
COF-1/2	.500	12.70	.59	15.00	7000	1000
COF-5/8	.625	15.88	.59	15.00	5000	1000
COF-3/4	.750	19.05	.71	18.00	4000	800
COF-7/8	.875	22.23	.71	18.00	2500	500
COF-7/8-DOME	.875	22.23	.84	21.00	2500	500
COF-1	1.000	25.40	.85	22.00	1500	300
COF-1-1/8	1.125	28.58	.85	22.00	1200	300
COF-1-1/4	1.250	31.75	.98	25.00	1000	200
COF-1-1/2	1.500	38.10	.98	25.00	500	100
COF-1-3/4	1.750	44.45	1.10	28.00	500	100





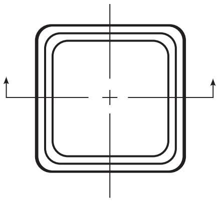
Material: Low-Density Polyethylene **Color*:** Black

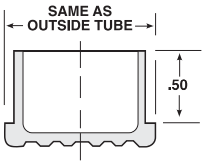


Series COF Round Caps make economical, attractive glides for everything from household and patio furniture to office chairs and tables. These finishing caps will cover scratches, burrs and distortions on pipes and rods caused from cutting operations. These durable caps will protect against injury and enhance the appearance of any product.

FP SERIES Finishing Plugs for Square Tubing

Caplug No.	DIMENSIONS		Packaging	
	To Fit Tube Size Size Inch	Wall Thickness Inch	Carton Quant.	Mini Pak Quant.
FP-85	.50	.065 (16 Ga.)	5000	1000
FP-125	.75	.065 (16 Ga.)	5000	1000
FP-161	1.00	.120 (11 Ga.)	2500	500
FP-164	1.00	.083 (14 Ga.)	2500	500
FP-165	1.00	.065 (16 Ga.)	2500	500
FP-166	1.00	.049 (18 Ga.)	2500	500
FP-167	1.00	.035 (20 Ga.)	2500	500
FP-201	1.25	.120 (11 Ga.)	2500	500
FP-204	1.25	.083 (14 Ga.)	2500	500
FP-205	1.25	.065 (16 Ga.)	2500	500
FP-241	1.50	.120 (11 Ga.)	1000	200
FP-244	1.50	.083 (14 Ga.)	1000	200
FP-245	1.50	.065 (16 Ga.)	1000	200
FP-321	2.00	.120 (11 Ga.)	1000	200
FP-324	2.00	.083 (14 Ga.)	1000	200
FP-325	2.00	.065 (16 Ga.)	1000	200





Material: Low-Density Polyethylene **Color*:** Black

Series FP closures are finishing plugs for square tubing. Sized for different gages, their shoulders fit flush with tubing sides. In addition to keeping dirt and moisture out of sensitive areas, Series FP Plugs provide a clean finish to the square tube ends on completed products. They also protect against injury from sharp tubing edges.

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Plugs - Finishing

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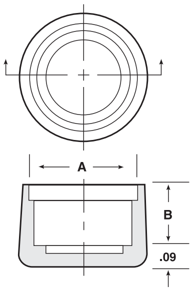
CERTIFICATE # 08-511

FCR SERIES Finishing Caps for Round Tubing

Caplug No.	DIMENSIONS				Packaging	
	A		B		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.		
FCR-12	.75	19.05	.50	12.70	5000	1000
FCR-14	.88	22.35	.50	12.70	2500	500
FCR-16	1.00	25.40	.50	12.70	2500	500
FCR-18	1.13	28.70	.62	15.75	2500	500
FCR-20	1.25	31.75	.62	15.75	2500	500



Material: Low-Density Polyethylene **Color*:** Black

Series FCR caps are used for finishing ends of round tubing on numerous products such as furniture, lawn and garden equipment, tools and appliances. Heavy wall construction makes them ideal for threaded connections where extra protection is required. Designed for easy installation, they sit with a firm grip that prevents accidental removal.

VRF SERIES Vinyl Rectangular Caps & Grips (flat end)

Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VRF-040x250-8	.040	1.01	.250	6.35	.500	12.70	5000	1000
VRF-040X990-16	.040	1.01	.990	25.15	1.000	25.40	5000	1000
VRF-062x250-16	.062	1.57	.250	6.35	1.000	25.40	5000	1000
VRF-062x375-16	.062	1.57	.375	9.52	1.000	25.40	5000	1000
VRF-062x500-16	.062	1.57	.500	12.70	1.000	25.40	4000	800
VRF-062X650-16	.062	1.57	.650	16.51	1.000	25.40	1000	200
VRF-062x875-16	.062	1.57	.875	22.23	1.000	25.40	1000	200
VRF-062x1125-16	.062	1.57	1.125	28.58	1.000	25.40	2500	500
VRF-062x1170-16	.062	1.57	1.170	29.71	1.000	25.40	1500	300
VRF-062x3000-16	.062	1.57	3.000	76.20	1.000	25.40	900	180
VRF-062x3500-16	.062	1.57	3.500	88.90	1.000	25.40	500	100
VRF-080x375-16	.080	2.03	.375	9.52	1.000	25.40	5000	1000
VRF-090x800-16	.090	2.28	.800	20.32	1.000	25.40	2500	500
VRF-090x1000-16	.090	2.28	1.000	25.40	1.000	25.40	2000	400
VRF-100x1145-16	.100	2.54	1.145	29.08	1.000	25.40	2000	400
VRF-125x250-16	.125	3.17	.250	6.35	1.000	25.40	5000	1000
VRF-125x468-16	.125	3.17	.468	11.89	1.000	25.40	4000	800
VRF-125x500-16	.125	3.17	.500	12.70	1.000	25.40	4000	800
VRF-125x750-16	.125	3.17	.750	19.05	1.000	25.40	2000	400
VRF-125x875-16	.125	3.17	.875	22.22	1.000	25.40	2000	400
VRF-125x1000-16	.125	3.17	1.000	25.40	1.000	25.40	2000	400
VRF-125x1250-16	.125	3.17	1.250	31.75	1.000	25.40	1500	300
VRF-125x1500-16	.125	3.17	1.500	38.10	1.000	25.40	1000	200
VRF-125x2000-16	.125	3.17	2.000	50.80	1.000	25.40	1000	200
VRF-187x500-16	.187	4.74	.500	12.70	1.000	25.40	3000	600

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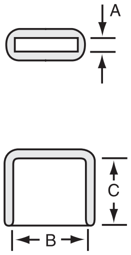
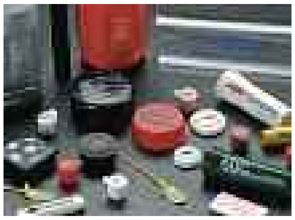


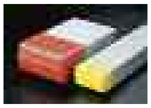
Note:
Most VRF parts can be pad printed with your company logo or product name in a variety of colors.

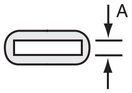


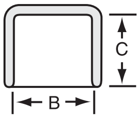
Material: Vinyl **Standard Color:** Black
Standard Option Colors*: White, Brown, Orange, Red, Green, Gray, Blue, Yellow

Designed to fit most rectangular tubes and bars, Series VRF Vinyl Rectangular Caps and Grips feature a flat, closed end. These caps have many applications, including handle grips, paint shields, end caps and ESD covers. They slip on quickly and easily, and maintain a snug fit. Printing is available for Series VRF.

VRF SERIES Vinyl Rectangular Caps & Grips (flat end) cont.







Note:

- VRF-040x250 through VRF-062x500 are available in lengths up to 1".
- VRF-062x875 through VRF-062x3000 are available in lengths up to 3-1/2".
- VRF-080x375 through VRF-3000x4000 are available in lengths up to 8".
- Lengths (C Dimension) are available in 1/16" (1.6mm) increments. Length tolerance is ±1/16" (1.6mm).

Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VRF-187x625-16	.187	4.74	.625	15.87	1.000	25.40	3000	600
VRF-187x687-16	.187	4.74	.687	17.44	1.000	25.40	2500	500
VRF-187x1000-16	.187	4.74	1.000	25.40	1.000	25.40	1500	300
VRF-187X1250-16	.187	4.74	1.250	31.75	1.000	25.40	1500	300
VRF-187x1500-16	.187	4.74	1.500	38.10	1.000	25.40	1000	200
VRF-187x1937-16	.187	4.74	1.937	49.19	1.000	25.40	1000	200
VRF-235x795-8**	.235	5.97	.795	20.19	.500	12.70	3000	600
VRF-250x500-16	.250	6.35	.500	12.70	1.000	25.40	3000	600
VRF-250x562-16	.250	6.35	.562	14.27	1.000	25.40	2500	500
VRF-250x625-16	.250	6.35	.625	15.87	1.000	25.40	2500	500
VRF-250x750-16	.250	6.35	.750	19.05	1.000	25.40	2000	400
VRF-250x875-16	.250	6.35	.875	22.22	1.000	25.40	2000	400
VRF-250x1000-16	.250	6.35	1.000	25.40	1.000	25.40	1500	300
VRF-250x1125-16	.250	6.35	1.125	28.58	1.000	25.40	1500	300
VRF-250x1250-16	.250	6.35	1.250	31.75	1.000	25.40	1000	200
VRF-250x1312-16	.250	6.35	1.312	33.32	1.000	25.40	1000	200
VRF-250x1500-16	.250	6.35	1.500	38.10	1.000	25.40	1000	200
VRF-250x1750-16	.250	6.35	1.750	44.45	1.000	25.40	1000	200
VRF-250x2000-16	.250	6.35	2.000	50.80	1.000	25.40	900	180
VRF-290x344-8	.290	7.37	.344	48.74	.500	12.70	5000	1000
VRF-290x344-16	.290	7.37	.344	8.74	1.000	25.40	3000	600
VRF-312x1250-16	.312	7.92	1.250	31.75	1.000	25.40	1000	200
VRF-312x1500-16	.312	7.92	1.500	38.10	1.000	25.40	1000	200
VRF-350x2900-16	.350	8.89	2.900	73.66	1.000	25.40	600	120
VRF-375x625-16	.375	9.52	.625	15.87	1.000	25.40	2000	400
VRF-375x1000-16	.375	9.52	1.000	25.40	1.000	25.40	1500	300
VRF-375x1125-16	.375	9.52	1.125	28.12	1.000	25.40	1000	200
VRF-375x1250-16	.375	9.52	1.250	31.75	1.000	25.40	1000	200
VRF-375x1500-16	.375	9.52	1.500	38.10	1.000	25.40	1000	200
VRF-375x7875-16	.375	9.52	7.875	200.03	1.000	25.40	250	50
VRF-500x625-16	.500	12.70	.625	15.87	1.000	25.40	1500	300
VRF-500x750-16	.500	12.70	.750	19.05	1.000	25.40	1500	300
VRF-500x1250-16	.500	12.70	1.250	31.75	1.000	25.40	1000	200
VRF-500x1500-16	.500	12.70	1.500	38.10	1.000	25.40	1000	200
VRF-500x2000-16	.500	12.70	2.000	50.80	1.000	25.40	800	160
VRF-500x3375-16	.500	12.70	3.375	85.72	1.000	25.40	500	100
VRF-625x1750-16	.625	15.87	1.750	44.45	1.000	25.40	800	160
VRF-625x2000-16	.625	15.87	2.000	50.80	1.000	25.40	1000	200
VRF-625x6500-16	.625	15.87	6.500	165.10	1.000	25.40	300	60
VRF-750x1000-16	.750	19.05	1.000	25.40	1.000	25.40	1000	200
VRF-750x1125-16	.750	19.05	1.125	28.57	1.000	25.40	1000	200
VRF-750x1500-16	.750	19.05	1.500	38.10	1.000	25.40	1500	300
VRF-750x2500-16	.750	19.05	2.500	63.50	1.000	25.40	500	100
VRF-750x3125-20	.750	19.05	3.125	79.38	1.250	31.80	500	100
VRF-750x4000-20	.750	19.05	4.000	101.60	1.250	31.80	250	50
VRF-1000x1500-16	1.000	25.40	1.500	38.10	1.000	25.40	1000	200
VRF-1000x2000-16	1.000	25.40	2.000	50.80	1.000	25.40	600	120
VRF-1062x2500-16	1.062	26.97	2.500	63.50	1.000	25.40	500	100
VRF-1500-2400-16	1.500	38.10	2.400	60.96	1.000	25.40	250	50
VRF-1500x2750-16	1.500	38.10	2.750	69.85	1.000	25.40	400	80
VRF-1500x3000-16**	1.500	38.10	3.000	76.20	1.000	25.40	400	80
VRF-1500x3125-16	1.500	38.10	3.125	79.38	1.000	25.40	250	50
VRF-2000x3000-16	2.000	50.80	3.000	76.20	1.000	25.40	300	60
VRF-2000x3500-16	2.000	50.80	3.500	88.90	1.000	25.40	250	50
VRF-2000x6000-24	2.000	50.80	6.000	152.40	1.500	38.10	150	30
VRF-2500x3000-16	2.500	63.50	3.000	76.20	1.000	25.40	250	50
VRF-3000x4000-24**	3.000	76.20	4.000	101.60	1.500	38.10	150	30

**** RADIUS**

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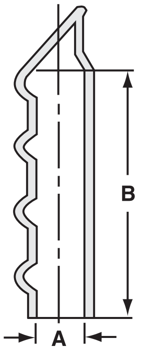
Plugs - Finishing

VHG SERIES Vinyl Hanger Grips

Caplug No.	DIMENSIONS				Packaging	
	A		B		Carton Quant.	Mini Pak Quant.
	To Fit O.D. in.	To Fit O.D. mm.	in.	mm.		
VHG-625-72	.625	15.88	4.5	114.30	250	50
VHG-750-72	.750	19.05	4.5	114.30	250	50
VHG-875-72	.875	22.22	4.5	114.30	250	50
VHG-1000-72	1.000	25.40	4.5	114.30	250	50

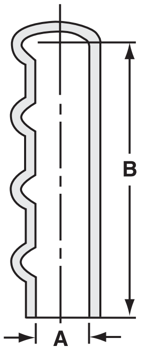


Material: Vinyl **Standard Color:** Black
Standard Option Colors*: White, Brown, Orange, Red, Green, Gray, Blue, Yellow

Designed with both finger nubs and a hanger tip that offers easy storage, Series VHG Vinyl Hanger Grips provide a snug fit to ensure caps do not fall off.

VNG SERIES Vinyl Nubbed Grips

Caplug No.	DIMENSIONS				Packaging	
	A		B		Carton Quant.	Mini Pak Quant.
	To Fit O.D. in.	To Fit O.D. mm.	in.	mm.		
VNG-750-72	.750	19.05	4.5	114.30	250	50
VNG-875-72	.875	22.22	4.5	114.30	250	50
VNG-1000-72	1.000	25.40	4.5	114.30	250	50
VNG-1187-72	1.187	30.14	4.5	114.30	250	50
VNG-1250-72	1.250	31.75	4.5	114.30	250	50



Material: Vinyl **Standard Color:** Black
Standard Option Colors*: White, Brown, Orange, Red, Green, Gray, Blue, Yellow

Series VNG Vinyl Nubbed Grips are equipped with convenient finger nubs to allow easier gripping. Designed to be used as handles, these reliable grips are durable and attractive.

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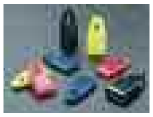
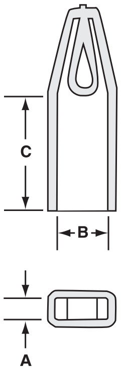
Plugs - Finishing

VHF SERIES Vinyl Hanger Tips (flat)



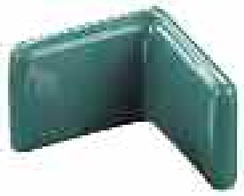
Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
VHF-125x750-16	.125	3.17	.750	19.05	1.000	25.40	1500	300
VHF-250x750-16	.250	6.35	.750	19.05	1.000	25.40	1000	200
VHF-250x1000-16	.250	6.35	1.000	25.40	1.000	25.40	900	180
VHF-375x1000-16	.375	9.52	1.000	25.40	1.000	25.40	800	160
VHF-500x1000-16	.500	12.70	1.000	25.40	1.000	25.40	700	140



Material: Vinyl **Standard Color:** Black
Standard Option Colors*: White, Brown, Orange, Red, Green, Gray, Blue, Yellow

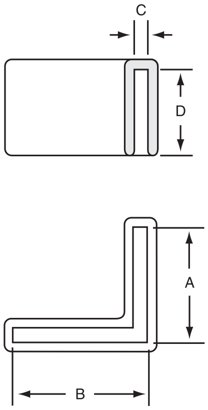
Series VHF Hanger Tips are rectangular caps with a flat hanger tip. These caps provide a snug fit ensuring they will not slip off. VHF caps are ideal for use with tools that need to be hung for storage or display.

Note:
VHF Series is available in lengths up to 1.75"



VAC SERIES Vinyl “U” Metal Frame Caps

Caplug No.	DIMENSIONS								Packaging	
	A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
VAC-750x750-8	.750	19.05	.750	19.05	.125	3.17	.500	12.70	3000	600
VAC-1000x1000-8	1.000	25.40	1.000	25.40	.125	3.17	.500	12.70	1500	300
VAC-1125x1875-8	1.125	28.57	1.875	47.62	.125	3.17	.500	12.70	900	180
VAC-1250x1250-8	1.250	31.75	1.250	31.75	.125	3.17	.500	12.70	1000	200
VAC-1500x1500-8	1.500	38.10	1.500	38.10	.125	3.17	.500	12.70	900	180
VAC-1875x1125-8	1.875	47.63	1.125	28.58	.125	3.17	.500	12.70	900	180
VAC-2000x2000-8	2.000	50.80	2.000	50.80	.125	3.17	.500	12.70	600	120



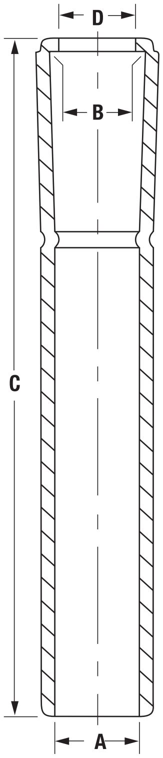
Material: Vinyl **Standard Color:** Black
Standard Option Colors*: White, Black, Brown, Orange, Red, Gray, Blue, Yellow

Designed to cap angle iron, Series VAC Vinyl Angle Caps are available in a variety of sizes to protect the corners of metal frames, reducing the risk of being cut by sharp metal edges.

Plugs - Finishing

HB SERIES Hose-Bend Restrictors

Caplug No.	DIMENSIONS								Packaging	
	A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
HB 20	.616	15.65	.699	17.75	5.29	134.37	.625	15.88	300	60
HB 40	.668	16.97	.758	19.25	5.74	145.80	.678	17.22	250	50
HB 60	.750	19.05	.852	21.64	6.43	163.32	.761	19.33	175	35
HB 80	.815	20.70	.926	23.52	6.98	177.29	.827	21.01	175	35
HB 100	.871	22.12	.995	25.27	7.76	197.10	.885	22.48	150	30



Material: Vinyl **Color*:** Black

The tapered design of these sleeves reduces bending stress near the hose-coupling junction. This added protection prevents damage to the hose and ultimately extends its life cycle. The upper lip firmly attaches to the coupling, holding the restrictor in place, eliminating the need for costly adhesives or clamps. These sleeves are designed to extend the life of a variety of hydraulic and pressure-wash hoses.

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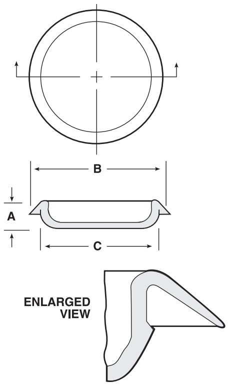
Plugs - Finishing

Expanded!

BP SERIES Button Plugs with Recessed-Type Heads



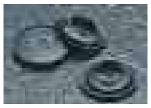
Caplug No.	DIMENSIONS										Packaging	
	Hole Size		Metal Thickness		A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
BP-3/8	.37 – .39	9.40 – 9.91	.02 – .10	.51 – 2.54	.31	7.87	.75	19.05	.41	10.41	5000	1000
BP-1/2	.50 – .52	.50 – .52	.02 – .07	.51 – 1.78	.29	7.37	.85	21.59	.55	13.97	5000	1000
BP-1/2-4	.50 – .52	.50 – .52	.06 – .13	1.52 – 3.30	.32	8.13	.85	21.59	.55	13.97	5000	1000
BP-11/16	.68 – .70	17.27 – 17.78	.02 – .09	.51 – 2.29	.28	7.11	1.04	26.42	.73	18.54	5000	1000
BP-3/4	.73 – .76	.73 – .76	.02 – .14	.51 – 3.56	.34	8.64	1.16	29.46	.79	20.07	5000	1000
BP-13/16	.79 – .82	20.07 – 20.83	.02 – .07	.51 – 1.78	.29	7.37	1.15	29.21	.85	21.59	5000	1000
BP-7/8	.87 – .90	22.10 – 22.86	.02 – .10	.51 – 2.54	.35	8.89	1.23	31.24	.93	23.62	5000	1000
BP-29/32	.90 – .91	22.86 – 23.11	.02 – .10	.51 – 2.54	.35	8.89	1.25	31.75	.95	24.13	5000	1000
BP-1	.99 –1.02	25.15 – 25.91	.02 – .10	.51 – 2.54	.35	8.89	1.35	34.29	1.05	26.67	5000	1000
BP-1-1/16	1.04 –1.07	26.42 – 27.18	.02 – .10	.51 – 2.54	.35	8.89	1.40	35.56	1.10	27.94	5000	1000
BP-1-3/32	1.09 –1.12	27.69 – 28.45	.02 – .10	.51 – 2.54	.35	8.89	1.47	37.34	1.16	29.46	5000	1000
BP-1-1/8	1.10 –1.15	27.94 – 29.21	.02 – .18	.51 – 4.57	.43	10.92	1.53	38.86	1.18	29.97	2500	500
BP-1-1/4	1.23 –1.27	31.24 – 32.26	.01 – .10	.25 – 2.54	.35	8.89	1.60	40.64	1.30	33.02	2500	500
BP-1-5/16	1.30 –1.34	33.02 – 34.04	.01 – .10	.25 – 2.54	.35	8.89	1.67	42.42	1.36	34.54	2500	500
BP-1-3/8	1.36 –1.40	34.55 – 35.56	.02 – .10	.25 – 2.54	.35	8.89	1.73	43.94	1.43	36.32	2500	500
BP-1-1/2	1.48 –1.52	37.59 – 38.61	.02 – .10	.25 – 2.54	.35	8.89	1.85	46.99	1.55	39.37	2500	500
BP-1-1/2-7	1.48 –1.52	37.59 – 38.61	.13 – .22	3.30 – 5.59	.50	12.70	1.83	46.48	1.54	39.12	2000	400
SI 416-2	1.75	44.45	.02 – .10	.51 – 2.54	.35	8.89	2.13	54.10	1.80	45.72	1500	300
BP-1-5/8	1.59–1.65	40.39 – 41.91	.03 – .10	.76 – 2.54	.36	9.14	2.00	50.80	1.68	42.67	1500	300
BP-1-3/4-5	1.70–1.78	43.18 – 45.21	.02 – .16	.51 – 4.06	.43	10.92	2.25	57.15	1.80	45.72	2000	400
BP-1-13/16	1.77–1.82	44.96 – 46.23	.02 – .10	.51 – 2.54	.35	8.89	2.16	54.86	1.85	46.99	2500	500
BP-1-7/8	1.85–1.90	46.99 – 48.26	.02 – .10	.51 – 2.54	.35	8.89	2.24	56.90	1.93	49.02	2000	400
BP-2	1.97–2.02	50.04 – 51.31	.02 – .10	.51 – 2.54	.36	9.14	2.35	59.69	2.05	52.07	1000	200
BP-2-1/2-5	2.44–2.53	61.98 – 64.26	.02 – .14	.51 – 3.56	.43	10.92	3.00	76.20	2.55	64.77	1000	200
SI 419-2	2.50	64.50	.02 – .10	.51 – 2.54	.38	9.65	3.00	76.20	2.57	65.28	1250	250
SI 421-2	3.00	76.20	.02 – .10	.51 – 2.54	.41	10.41	3.56	90.42	3.06	77.72	500	100

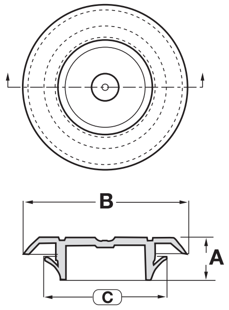
Material: Low-Density Polyethylene **Color*:** Black

Series BP Button Plugs with recessed-type heads can be used for plugging holes in equipment made of sheet metal, such as automobile bodies, tanks, refrigeration units, etc. Series BP Button Plugs can be snapped into holes easily and are held in place by a bead until deliberately removed.

Expanded!

BPFE SERIES Ergonomic Button Plugs with Flush-Type Heads





Caplug No.	DIMENSIONS										Packaging	
	Hole Size		Metal Thickness		A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
BPFE-15MM	.571 – .631	14.50 – 16.00	.031 – .079	.80 – 2.00	.307	7.80	1.024	26.00	.720	18.30	5000	1000
BPFE-17MM	.650 – .709	15.20 – 18.00	.031 – .079	.80 – 2.00	.307	7.80	1.102	28.00	.799	20.30	5000	1000
BPFE-19MM	.728 – .787	18.50 – 20.00	.031 – .079	.80 – 2.00	.303	7.70	1.189	30.20	.886	22.50	5000	1000
BPFE-21MM	.807 – .866	20.50 – 22.00	.031 – .079	.80 – 2.00	.307	7.80	1.260	32.00	.957	24.30	5000	1000
BPFE-23MM	.866 – .945	22.50 – 24.00	.031 – .079	.80 – 2.00	.307	7.80	1.339	34.00	1.035	26.40	5000	1000
BPFE-25MM	.965 – 1.024	24.50 – 26.00	.031 – .079	.80 – 2.00	.295	7.50	1.378	35.00	1.102	28.00	5000	1000
BPFE-27MM	1.043 – 1.102	26.50 – 28.00	.031 – .079	.80 – 2.00	.307	7.80	1.496	38.00	1.193	30.30	2500	1000
BPFE-29MM	1.122 – 1.181	28.50 – 30.00	.031 – .079	.80 – 2.00	.307	7.80	1.575	40.00	1.272	32.30	2500	500
BPFE-31MM	1.201 – 1.260	30.50 – 32.00	.031 – .079	.80 – 2.00	.307	7.80	1.654	42.00	1.350	34.30	2500	500
BPFE-33MM	1.280 – 1.339	32.50 – 34.00	.031 – .079	.80 – 2.00	.307	7.80	1.732	44.00	1.429	36.30	2500	500

Material: FlexTemp (Thermoplastic Rubber) **Color*:** Black

Designed primarily to plug holes in sheet metal, typically these plugs are installed manually. Taking this into consideration, Caplugs manufactured the button plug in flexible Thermoplastic Rubber. Not only is it easier to handle, but it makes installation and removal quick and easy. The BPF Ergo offers greater versatility because the pliable nature of the material allows one size plug to fit a variety of different sized holes.

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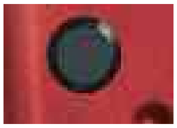
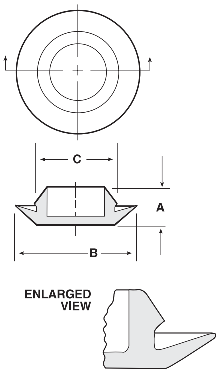
Plugs - Finishing

BPF SERIES Button Plugs with Flush-Type Heads



Caplug No.	DIMENSIONS										Packaging	
	Hole Size		Metal Thickness		A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
BPF-5mm**	.18 – .19	4.57 – 4.90	.02 – .04	.51 – 1.02	.21	5.40	.39	9.90	.21	5.40	5000	1000
BPF-6mm**	.23 – .24	5.84 – 6.10	.02 – .06	.51 – 1.52	.45	11.40	.50	12.70	.29	7.40	5000	1000
BPF-1/4**	.24 – .25	6.10 – 6.35	.02 – .07	.51 – 1.78	.21	5.33	.50	12.70	.28	7.11	5000	1000
BPF-1/4-4**	.24 – .25	6.10 – 6.35	.07 – .13	1.78 – 3.30	.30	7.62	.50	12.70	.28	7.11	5000	1000
BPF-3/8	.37 – .38	9.40 – 9.65	.02 – .05	.51 – 1.27	.19	4.83	.75	19.05	.41	10.41	5000	1000
BPF-3/8-3	.37 – .38	9.40 – 9.65	.06 – .11	1.52 – 2.79	.24	6.10	.75	19.05	.41	10.41	5000	1000
BPF-7/16	.43 – .45	10.92 – 11.43	.03 – .06	.76 – 1.52	.22	5.59	.69	17.53	.47	11.94	5000	1000
BPF-1/2	.49 – .51	12.45 – 12.95	.03 – .08	.76 – 2.03	.25	6.35	.86	21.84	.54	13.72	5000	1000
BPF-9/16	.55 – .56	13.97 – 14.22	.03 – .08	.76 – 2.03	.25	6.35	.87	22.10	.60	15.24	5000	1000
BPF-5/8	.61 – .63	15.49 – 16.00	.06 – .08	1.52 – 2.03	.26	6.60	.81	20.57	.67	17.02	5000	1000
SI-430	.62	15.87	.06 – .08	1.52 – 2.03	.25	6.35	1.06	26.92	.68	17.15	10000	2000
BPF-11/16	.68 – .70	17.27 – 17.78	.03 – .08	.76 – 2.03	.25	6.35	1.01	25.66	.73	18.54	5000	1000
BPF-3/4	.73 – .76	18.54 – 19.30	.05 – .11	1.27 – 2.79	.29	7.37	1.01	25.66	.79	20.07	5000	1000
BPF-13/16-6	.80 – .83	20.32 – 21.08	.16 – .19	4.06 – 4.83	.37	9.40	1.11	28.20	.85	21.59	5000	1000
SI-402	.81	20.62	.03 – .08	.76 – 2.03	.37	9.40	1.11	28.19	.85	21.59	6000	1200
BPF-7/8	.86 – .88	21.84 – 22.35	.03 – .08	.76 – 2.03	.25	6.35	1.16	29.47	.91	23.11	5000	1000
BPF-7/8-6	.86 – .88	21.84 – 22.35	.13 – .18	3.30 – 4.57	.36	9.14	1.16	29.47	.91	23.11	5000	1000
BPF-15/16	.92 – .95	23.37 – 24.13	.03 – .08	.76 – 2.03	.25	6.35	1.31	33.28	.98	24.89	5000	1000
SI-413	1.00	25.40	.03 – .08	.76 – 2.03	.25	6.35	1.38	35.05	1.04	26.42	5000	1000
SI-465	1.09	27.60	.03 – .08	.76 – 2.03	.25	6.35	1.31	33.27	1.15	29.21	5000	1000
BPF-1-5	.98 – 1.01	24.89 – 25.66	.08 – .20	2.03 – 5.08	.40	10.16	1.35	34.29	1.04	26.42	2500	500
BPF-1-1/8-6	1.10 – 1.15	27.94 – 29.21	.02 – .18	.51 – 4.57	.43	10.92	1.53	38.86	1.18	29.97	2500	500
BPF-1-3/16	1.16 – 1.20	29.47 – 30.48	.03 – .08	.76 – 2.03	.25	6.35	1.56	39.63	1.22	30.99	2500	500
SI-404	1.25	31.75	.03 – .08	.76 – 2.03	.43	10.92	1.53	38.86	1.18	29.97	2000	400
SI-414	1.25	31.75	.03 – .08	.76 – 2.03	.25	6.35	1.62	41.15	1.29	32.77	2500	500
BPF-1-5/16	1.29 – 1.33	32.77 – 33.78	.03 – .08	.76 – 2.03	.25	6.35	1.68	42.67	1.36	34.55	2500	500
SI-415	1.50	38.10	.03 – .08	.76 – 2.03	.25	6.35	1.62	41.15	1.36	34.54	2000	500
SI-416	1.75	44.45	.03 – .08	.76 – 2.03	.25	6.35	1.68	42.67	1.54	39.12	1500	400
BPF-2	1.98 – 2.01	50.29 – 51.05	.03 – .08	.76 – 2.03	.29	7.36	2.36	59.94	2.04	51.81	1000	200
BPF-2-1/8	2.10 – 2.14	53.34 – 54.36	.03 – .08	.76 – 2.03	.25	6.35	2.49	63.25	2.17	55.12	1000	200
SI-419	2.50	63.50	.03 – .08	.76 – 2.03	.25	6.35	3.00	76.20	2.56	65.02	1000	200
SI-472	2.62	66.67	.03 – .08	.76 – 2.03	.25	6.35	3.12	79.25	2.68	67.95	1000	200
BPF-3	2.97 – 3.02	75.44 – 76.71	.03 – .08	.76 – 2.03	.25	6.35	3.36	85.35	3.06	77.73	750	150
SI-407	3.12	79.37	.03 – .08	.76 – 2.03	.25	6.35	3.52	89.41	3.18	80.77	700	140
BPF-3-3/8	3.35 – 3.40	85.09 – 86.36	.03 – .08	.76 – 2.03	.28	7.11	3.75	95.25	3.43	87.13	500	100
BPF-3-1/2	3.47 – 3.52	88.14 – 89.41	.03 – .11	.76 – 2.79	.28	7.11	3.86	98.05	3.56	90.43	500	100
BPF-4	3.97 – 4.02	100.84 – 102.11	.05 – .10	1.27 – 2.54	.28	7.11	4.37	111.00	4.13	104.91	500	100
SI-425	4.00	101.60	.05 – .10	1.27 – 2.54	.29	7.37	4.50	114.30	4.06	103.12	350	70
SI-425S	4.00	101.60	.05 – .10	1.27 – 2.54	.50	12.70	4.50	114.30	4.10	104.14	400	80



**** BPF-5mm, BPF-6mm, BPF-1/4 and BPF-1/4-4 are EVA (ethylene vinyl acetate).**

Material: Low-Density Polyethylene **Color*:** Black

Series BPF Button Plugs with flush-type heads can be used for plugging holes in equipment made of sheet metal, such as automobile bodies, tanks, refrigeration units, etc. Series BPF Button Plugs can be snapped into holes easily and are held in place by a bead until deliberately removed.

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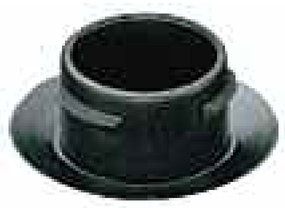

Plugs - Finishing

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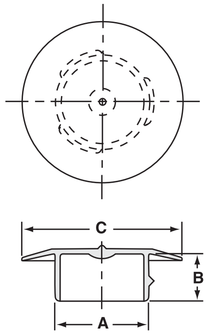
PIP SERIES Push-In Plugs

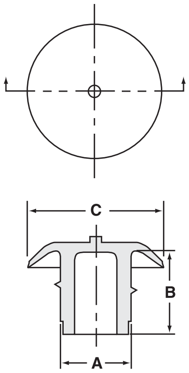


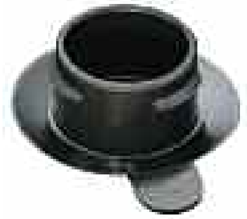
Caplug No.	To Fit SAE Thread Size In	To Fit NPT Thread Size In	DIMENSIONS						Packaging	
			A		B		C		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.		
PIP-1/4**	1/4	---	.206	5.23	.25	6.35	.40	10.16	5000	1000
PIP-5/16**	5/16	---	.253	6.43	.24	6.10	.52	13.21	5000	1000
PIP-3/8	3/8	1/8	.317	8.05	.24	6.10	.59	14.99	5000	1000
PIP-7/16	7/16	---	.370	9.40	.27	6.86	.64	16.26	5000	1000
PIP-1/2	1/2	1/4	.444	11.28	.27	6.86	.72	18.29	5000	1000
PIP-9/16	9/16	---	.500	12.70	.29	7.37	.81	20.57	5000	1000
PIP-5/8	5/8	3/8	.558	14.17	.29	7.37	.96	24.38	5000	1000
PIP-3/4	3/4	---	.681	17.30	.29	7.37	.95	24.13	5000	1000
PIP-7/8	7/8	---	.797	20.24	.29	7.37	1.15	29.21	5000	1000
IB 16	1	3/4	.918	23.32	.25	6.35	1.30	33.02	5000	1000
IB 17	1-1/16	---	.974	24.74	.25	6.35	1.40	35.56	4500	900
PIP-1 5/8	1-5/8	---	1.525	38.74	.46	11.68	2.03	51.56	2000	400
PIP-1 7/8	1-7/8	---	1.775	45.09	.50	12.70	2.28	57.91	1500	300

**** PIP-1/4 and -5/16 are EVA material**

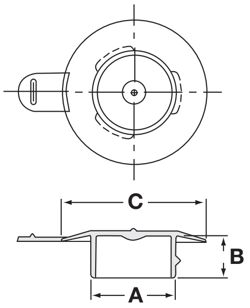
Material: Low-Density Polyethylene **Color*:** Black

Series PIP Plugs are designed to fit SAE and NPT thread sizes. These parts offer the convenience of a push-in plug with the plugging quality of a threaded plug.





PIP-TAB SERIES Push-In Plugs with Pull-Tab



Caplug No.	To Fit SAE Thread Size In	To Fit NPT Thread Size In	DIMENSIONS						Packaging	
			A		B		C		Carton Quant.	Mini Pak Quant.
			in.	mm.	in.	mm.	in.	mm.		
PIP-3/8 TAB	3/8	1/8	.317	8.05	.24	6.10	.59	14.99	5000	1000
PIP-7/16 TAB	7/16	---	.370	9.40	.27	6.86	.64	16.26	5000	1000
PIP-1/2 TAB	1/2	1/4	.444	11.28	.27	6.86	.72	18.29	5000	1000
PIP-9/16 TAB	9/16	---	.500	12.70	.29	7.37	.81	20.57	5000	1000
PIP-5/8 TAB	5/8	3/8	.558	14.17	.29	7.37	.96	24.38	5000	1000
PIP-3/4 TAB	3/4	---	.681	17.30	.29	7.37	.95	24.13	5000	1000
PIP-7/8 TAB	7/8	---	.797	20.24	.29	7.37	1.15	29.21	5000	1000
PIP-1 5/8	1-5/8	---	1.525	38.74	.46	11.68	2.03	51.56	2000	400
PIP-1 7/8	1-7/8	---	1.775	45.09	.50	12.70	2.28	57.91	1500	300

Material: Low-Density Polyethylene **Color*:** Black

Series PIP-Tab Plugs are designed to fit SAE and NPT thread sizes. These parts offer the convenience of a push-in plug with the plugging quality of a threaded plug. Series PIP-Tab also has a convenient pull-tab for easy removal.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Finishing

ISO 9001:2000 Certified
CERTIFICATE # 08-511

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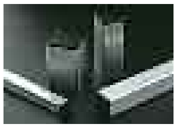
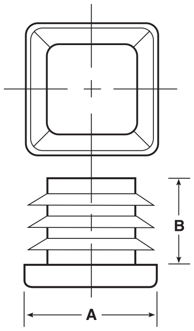


SQR SERIES Plugs for Square Tubing

Caplug No.	DIMENSIONS				Packaging	
	A–To Fit Tube Size O.D. In	Gage (Wall Thickness) In	B in.	B mm.	Carton Quant.	Mini Pak Quant.
SQR-1/2-16-18	.500	16 – 18 Ga. (.065 – .049)	.44	11.17	5000	1000
SQR-5/8-14-20	.625	14 – 20 Ga. (.083 – .035)	.43	10.92	5000	1000
SQR-3/4-10-14	.750	10 – 14 Ga. (.134 – .083)	.43	10.92	2500	500
SQR-3/4-14-20	.750	14 – 20 Ga. (.083 – .035)	.43	10.92	2500	500
SQR-7/8-14-20	.875	14 – 20 Ga. (.083 – .035)	.43	10.92	3000	600
SQR-1-10-14	1.000	10 – 14 Ga. (.134 – .083)	.43	10.92	2500	500
SQR-1-10-14 THICK HEAD	1.000	10 – 14 Ga. (.134 – .083)	.43	10.92	2000	400
SQR-1-14-20	1.000	14 – 20 Ga. (.083 – .035)	.43	10.92	2500	500
SQR-1-14-20 THICK HEAD	1.000	14 – 20 Ga. (.083 – .035)	.43	10.92	1000	200
SQR-1-1/8-14-20	1.125	14 – 20 Ga. (.083 – .035)	.49	12.45	1500	300
SQR-1 1/4-10-14	1.250	10 – 14 Ga. (.134 – .083)	.52	13.21	1000	200
SQR-1-1/4-14-20	1.250	14 – 20 Ga. (.083 – .035)	.52	13.21	1000	200
SQR-1 3/8-10-14	1.375	10 – 14 Ga. (.134 – .083)	.52	13.21	1000	200
SQR-1 3/8-14-20	1.375	14 – 20 Ga. (.083 – .035)	.52	13.21	1000	200
SQR-1-1/2-10-14	1.500	10 – 14 Ga. (.134 – .083)	.52	13.21	1000	200
SQR-1-1/2-14-20	1.500	14 – 20 Ga. (.083 – .035)	.52	13.21	1000	200
SQR-1 3/4-10-14	1.750	10 – 14 Ga. (.134 – .083)	.52	13.21	500	100
SQR-1-3/4-14-20	1.750	14 – 20 Ga. (.083 – .035)	.52	13.21	500	100
SQR-2-4-8	2.000	4 – 8 Ga. (.238 – .165)	.52	13.21	500	100
SQR-2-10-14	2.000	10 – 14 Ga. (.134 – .083)	.52	13.21	500	100
SQR-2-14-20	2.000	14 – 20 Ga. (.083 – .035)	.52	13.21	500	100
SQR-2-1/4-10-14	2.250	10 – 14 Ga. (.134 – .083)	.52	13.21	200	40
SQR-2-1/2-6-10	2.500	6 – 10 Ga. (.203 – .134)	.56	14.22	300	60
SQR-2 1/2-16-23	2.500	16 – 23 Ga. (.065 – .025)	.56	14.20	300	60
SQ-20-1	2.500	10 – 14 Ga. (.134 – .083)	.50	12.70	500	100
SQ-22-3	2.750	14 – 20 Ga. (.083 – .035)	.65	16.51	200	40
SQ-22-4	2.750	8 – 14 Ga. (.165 – .083)	.73	18.54	200	40
SQ-24-1	3.000	3 – 7 Ga. (.259 – .180)	.50	12.70	400	80
SQ-25-3	3.125	3 – 7 Ga. (.259 – .180)	.97	24.64	150	65
SQR-80mm	80 mm	2.5 – 5.6 mm	.98	24.89	100	20
SQ-30-3	3.500	6 Ga. (.203)	.69	17.53	100	20
SQ-30-4	3.500	6 – 14 Ga. (.203 – .083)	.69	17.53	100	20
SQ-31-3	3.875	4 – 8 Ga. (.224 – .165)	1.00	25.40	200	40
SQ-32-3	4.000	4 – 11 Ga. (.238 – .120)	.91	23.11	150	30
SQR-100mm	100 mm	5-6.3 mm	.98	24.89	75	15
SQ-38	4.750	6 – 11 Ga. (.203 – .120)	1.00	25.40	100	20
SQR-5-3-10	5.000	3 – 10 Ga. (.259 – .134)	.98	24.90	75	15
SQR-6-3-10	6.000	3 – 10 Ga. (.259 – .134)	.98	24.90	50	10



Material: Low-Density Polyethylene **Color*:** Black

Series SQR Square Plugs feature a series of externally tapered ribs designed to accommodate a wide range of tubing gages while also satisfying the fit adjustments on tubing with inside dimensional fluctuations. The exterior ribs are designed to provide a sure grip inside a tube without the unsightly plastic shavings found on many straight-wall glide installations.

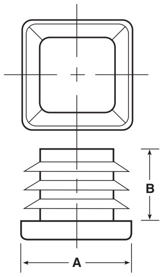
White Glides – Various SQR parts are available in white. These part numbers are noted on chart in red.

Color Glides – For applications that are highly visible on a finished product, use one of our colored glides. Match your company colors or choose a color that complements your product. We can custom match a shade.

Custom Designed Glides – We can also customize existing glides by cutting out sidewalls, adding additional support inside the glide for heavier load applications, and adding ventilation holes. For applications that are highly visible, we can pad print or engrave your company logo, part number, or even instructions on the face of the glide.

SQRV SERIES Plugs for Square Tubing

Caplug No.	DIMENSIONS				Packaging	
	A–To Fit Tube Size O.D. In	Gage (Wall Thickness) In	B in.	B mm.	Carton Quant.	Mini Pak Quant.
SQRV-3/4-14-20	.750	14 – 20 Ga. (.083 – .035)	.43	10.92	2500	500
SQRV-1-10-14	1.000	10 – 14 Ga. (.134 – .083)	.43	10.92	2500	500
SQRV-1-14-20	1.000	14 – 20 Ga. (.083 – .035)	.43	10.92	2500	500
SQRV-1-1/4-14-20	1.250	14 – 20 Ga. (.083 – .035)	.52	13.21	1000	200
SQRV-1-1/2-10-14	1.500	10 – 14 Ga. (.134 – .083)	.52	13.21	1000	200
SQRV-1-1/2-14-20	1.500	14 – 20 Ga. (.083 – .035)	.52	13.21	1000	200
SQRV-2-10-14	2.000	10 – 14 Ga. (.134 – .083)	.52	13.21	500	100



Material: Vinyl **Color:** Black

Series SQRV are ergonomically friendly vinyl glides that can be easily installed and removed on a regular basis. Our vinyl glides are injection-molded to produce the intricate detail and design tube glides provide, but with a flexible design allowing quick and easy installation without the use of tools. Vinyl also decreases mobility or sliding on floors, keeping furniture, fixtures, etc. in place.

Plugs - Finishing

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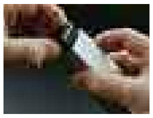
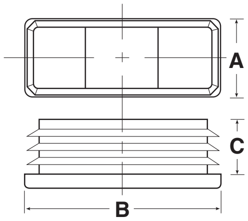
RER SERIES Plugs for Rectangular Tubing





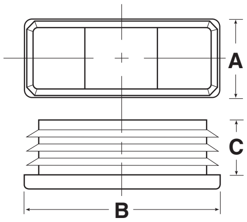
White Glides available are noted on chart in red RER (50x100mm).

Caplug No.	DIMENSIONS					Packaging	
	A	B	Gage (Wall Thickness)	C		Carton Quant.	Mini Pak Quant.
	in.	in.	In	in.	mm.		
RER-1/2x1-16-18	.500	1.000	16 – 18 Ga. (.065 – .049)	.43	10.92	2500	500
RC-0515	.500	1.500	14 – 20 Ga. (.083 – .035)	.05	1.27	3000	600
REC-5/8x1-1/4-14	.625	1.250	14 Ga. (.083)	.50	12.70	2000	400
RER-5/8x1-3/8-14-20	.625	1.375	14 – 20 Ga. (.083 – .035)	.43	10.92	2500	500
RER-3/4x1-1/2-14-20	.750	1.500	14 – 20 Ga. (.083 – .035)	.43	10.92	2000	400
RER-1x1-1/4-14-20	1.000	1.250	14 – 20 Ga. (.083 – .035)	.50	12.70	2000	400
RER-1x1-1/2-10-14	1.000	1.500	10 – 14 Ga. (.134 – .083)	.50	12.70	1000	200
RER-1x1-1/2-14-20	1.000	1.500	14 – 20 Ga. (.083 – .035)	.50	12.70	1000	200
RER-1x2-10-14	1.000	2.000	10 – 14 Ga. (.134 – .083)	.50	12.70	1000	200
RER-1x2-14-20	1.000	2.000	14 – 20 Ga. (.083 – .035)	.50	12.70	1000	200
RC-1020-3†	1.000	2.000	16 Ga. (.065)	.36	9.14	1500	300
RC-1025	1.000	2.500	14 – 20 Ga. (.083 – .035)	.45	11.43	1000	200
RER-1x2-1/2-16-18	1.000	2.500	16 – 18 Ga. (.065 – .049)	.50	12.70	1000	200
RER-1x3-14-20	1.000	3.000	14 – 20 Ga. (.083 – .035)	.51	12.95	500	100
RER-1-1/2x2-10-14	1.500	2.000	10 – 14 Ga. (.134 – .083)	.50	12.70	600	120
RER-1-1/2x2-1/2-12-16	1.500	2.500	12 – 16 Ga. (.109 – .065)	.53	13.46	300	60
RC-1530-1	1.500	3.000	10 – 14 Ga. (.134 – .083)	.50	12.70	500	100
RER-1-1/2x3-1/2-10-14	1.500	3.500	10 – 14 Ga. (.134 – .083)	.60	15.24	300	60
RER-2x2-1/2-10-14	2.000	2.500	10 – 14 Ga. (.134 – .083)	.52	13.20	500	100
RER-2x3-6-8	2.000	3.000	6 – 8 Ga. (.203 – .165)	.52	31.20	250	50
RER-2x3-10-14	2.000	3.000	10 – 14 Ga. (.134 – .083)	.52	13.21	250	50
RC-2030	2.000	3.000	14 – 20 Ga. (.083 – .035)	.50	12.70	500	100
RC-2040-2	2.000	4.000	6 – 11 Ga. (.203 – .120)	.94	23.88	350	70
RER-40x80-3-4mm	40mm	80mm	3 – 4mm	.94	23.88	250	50
RER-50x100mm 6-12	2.000	4.000	6 – 8 Ga. (.203 – .109)	.65	16.51	200	40
RC-2040-1	2.000	4.000	10 – 14 Ga. (.134 – .083)	.50	12.70	250	50
RC-2040	2.000	4.000	14 – 20 Ga. (.083 – .035)	.50	12.70	250	50
RC-2050-3†	2.000	5.000	8 Ga. (.165)	1.00	25.40	200	40
RC-2050-4†	2.000	5.000	10 Ga. (.134)	1.00	25.40	175	35
RER-3x4-6-8	3.000	4.000	6 – 8 Ga. (.203 – .165)	.98	24.90	100	20

Material: Low-Density Polyethylene **Color*:** Black

Featuring the same external rib design of Series SQR Square Plugs, Series RER Rectangular Plugs are offered in a broad selection of width-to-length proportions to fit many special tubing shapes found on stands for computer terminals and office machines, display fixtures, and similar metal furnishings and equipment. Durable construction ensures exceptional performance in business and commercial applications.

RERV SERIES Plugs for Rectangular Tubing



Caplug No.	DIMENSIONS					Packaging	
	A	B	Gage (Wall Thickness)	C		Carton Quant.	Mini Pak Quant.
	in.	in.	In	in.	mm.		
RERV-50x100mm 6-12	2.000	4.000	6 – 12 Ga. (.194 – .105)	.65	16.51	200	40

Material: Vinyl **Color*:** Black

Series RERV are ergonomically friendly vinyl glides that can be easily installed and removed on a regular basis. Our vinyl glides are injection-molded to produce the intricate detail and design tube glides provide, but with a flexible design allowing quick and easy installation without the use of tools. For finishing applications, we can imprint company names, logos, or even instructions.

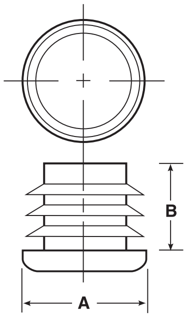
IMSG
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Finishing

CCF SERIES Plugs for Round Tubing

Expanded!

Caplug No.	DIMENSIONS				Packaging	
	A – To Fit Tube Size O.D. In	Gage (Wall Thickness) In	B in.	B mm.	Carton Quant.	Mini Pak Quant.
CCF-1/2-13-14	.500	13 – 14 Ga. (.095 – .083)	.45	11.40	10000	1000
CCF-1/2-16-20	.500	16 – 20 Ga. (.065 – .035)	.45	11.43	10000	1000
CCF-5/8-10-12 DOME	.625	10 – 12 Ga. (.134 – .109)	.45	11.43	6000	1000
CCF-5/8-14-20	.625	14 – 20 Ga. (.083 – .035)	.44	11.18	5000	1000
CCF-3/4-14-20	.750	14 – 20 Ga. (.083 – .035)	.44	11.18	5000	1000
CCF-7/8-10-14	.875	10 – 14 Ga. (.134 – .083)	.44	11.20	4000	800
CCF-7/8-14-20	.875	14 – 20 Ga. (.083 – .035)	.44	11.18	4000	800
CCF-1-10-14	1.000	10 – 14 Ga. (.134 – .083)	.44	11.18	4000	800
CCF-1-14-20	1.000	14 – 20 Ga. (.083 – .035)	.44	11.18	4000	800
CCF-1-1/8-14-20	1.125	14 – 20 Ga. (.083 – .035)	.52	13.21	2500	500
CCF-1-1/4-10-14	1.250	10 – 14 Ga. (.134 – .083)	.52	13.21	1500	300
CCF-1-1/4-14-20	1.250	14 – 20 Ga. (.083 – .035)	.52	13.21	1500	300
RT-11	1.375	14 – 20 Ga. (.083 – .035)	.50	12.70	1500	300
CCF-1-1/2-8-12	1.500	8 – 12 Ga. (.165 – .109)	.52	13.21	1500	300
CCF-1-1/2-10-14	1.500	10 – 14 Ga. (.134 – .083)	.52	13.21	1500	300
CCF-1-1/2-14-20	1.500	14 – 20 Ga. (.083 – .035)	.52	13.21	1500	300
RT-13-1	1.625	10 – 14 Ga. (.134 – .083)	.50	12.70	1000	200
CCF-1-5/8-14-20	1.625	14 – 20 Ga. (.083 – .035)	.52	13.21	1000	200
CCF-1-3/4-10-14	1.750	10 – 14 Ga. (.134 – .083)	.59	14.99	1000	200
CCF-1-3/4-14-20	1.750	14 – 20 Ga. (.083 – .035)	.59	14.99	1000	200
RT-195-1	1.950	10 – 14 Ga. (.134 – .083)	.56	14.22	750	150
CCF-2-10-14	2.000	10 – 14 Ga. (.134 – .083)	.59	14.99	500	100
CCF-2-14-20	2.000	14 – 20 Ga. (.083 – .035)	.59	14.99	500	100
CCF-2-1/8-10-16	2.125	10 – 16 Ga. (.134 – .065)	.67	17.02	700	140
CCF-2-1/4-10-14	2.250	10 – 14 Ga. (.134 – .083)	.66	16.76	500	100
RT-18	2.250	14 – 20 Ga. (.083 – .035)	.69	17.53	500	100
CCF-2-3/8-10-14	2.375	10 – 14 Ga. (.134 – .083)	.66	16.76	400	80
CCF-2-1/2-8-12	2.500	8 – 12 Ga. (.165 – .109)	.69	17.53	400	80
CCF-2-1/2-14-20	2.500	14 – 20 Ga. (.083 – .035)	.69	17.53	400	80
RT-22-3	2.750	7 – 14 Ga (.180 – .083)	.84	21.34	250	50
RT-24-3	3.000	8 – 11 Ga. (.165 – .120)	.84	21.34	200	40
RT-24-4	3.000	13 – 17 Ga. (.095 – .58)	.84	21.34	200	40
RT-30-3	3.500	6 – 13 Ga. (.165 – .083)	.77	19.56	150	30
CCF-4-4-8	4.000	4 – 8 Ga. (.224 – .165)	1.00	25.40	100	20
CCF-4-10-16	4.000	4 – 8 Ga. (.224 – .165)	1.00	25.40	100	20
RT-38	4.750	8 – 14 Ga. (.165 – .083)	1.10	27.94	60	12



Material: Low-Density Polyethylene **Color*:** Black

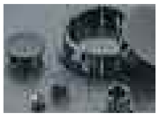
Durable construction and excellent gliding characteristics recommend Series CCF Round Plugs for use on a wide range of metal furniture, appliances, and similar items. Series CCF features external ribs ensuring a secure fit and a thick, impactand abrasion-resistant base. None of Caplugs Rib-Lok Load-Bearing Furniture Glides are subject to rust or corrosion.

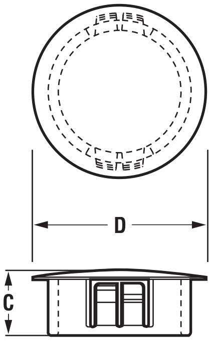
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Plugs - Finishing

DOP SERIES Dome Plugs

Expanded!





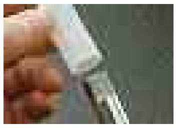
Caplug No.	CHASSIS DIMMENSIONS				DIMENSIONS				Packaging	
	Maximum Thickness		Mounting Hole Dia.		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
DOP 187	.062	1.57	.187	4.75	.23	5.84	.25	6.35	8000	1600
DOP 250	.062	1.57	.250	6.35	.31	7.87	.31	7.87	4000	800
DOP 312	.062	1.57	.312	7.92	.31	7.87	.38	9.65	3000	600
DOP 375	.125	3.18	.375	9.53	.41	10.41	.47	11.94	4000	800
DOP 437	.125	3.18	.437	11.10	.41	10.41	.53	13.46	5000	1000
DOP 500	.125	3.18	.500	12.70	.41	10.41	.58	14.73	4000	800
DOP 625	.125	3.18	.625	15.88	.41	10.41	.72	18.29	4000	800
DOP 750	.125	3.18	.750	19.05	.41	10.41	.92	23.37	1700	340
DOP 875	.125	3.18	.875	22.23	.45	11.43	1.02	25.91	2000	400
DOP 1250	.125	3.18	1.250	31.75	.45	11.43	1.38	35.05	1000	200
DOP 1375	.125	3.18	1.375	34.93	.45	11.43	1.50	38.10	500	100
DOP 1500	.125	3.18	1.500	38.10	.45	11.43	1.67	42.42	400	80
DOP 2000	.125	3.18	2.000	50.80	.47	11.94	2.17	55.12	200	40

Material: Nylon 6 **Color*:** Black

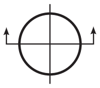
The DOP series are finishing plugs for unneeded or unused holes in chassis or other surfaces. These attractive plugs lock firmly into a surface up to ¼" thick by simply applying pressure and pushing it into the hole. The convex design tapers to a thin edge for a seamless finish. The matte finish head offers a professional and finished appearance for your product.

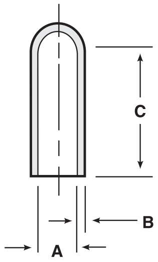
Masking

SRC SERIES Silicone Rubber Caps



Caplug No.	DIMENSIONS							Packaging	
	To Fit Stud Size	A		B		C		Carton Quant.	Mini Pak Quant.
		+/-.020 in.	+/-.51 mm	+/-.010 In	+/-.25 mm	+/-.020 in.	+/-.51 mm.		
SRC-040-12	-	.040	1.02	.05	1.27	.75	19.05	1000	200
SRC-070-16	-	.070	1.78	.06	1.52	1.00	25.40	1000	200
SRC-080-12	-	.080	2.03	.06	1.52	.75	19.05	1000	200
SRC-093-12	4	.093	2.36	.06	1.52	.75	19.05	1000	200
SRC-100-16	-	.100	2.54	.06	1.52	1.00	25.40	1000	200
SRC-109-12	5	.109	2.77	.06	1.52	.75	19.05	1000	200
SRC-125-8	6	.125	3.18	.06	1.52	.50	12.70	1000	200
SRC-125-16	6	.125	3.18	.06	1.52	1.00	25.40	1000	200
SRC-137-16	-	.137	3.48	.06	1.52	1.00	25.40	1000	200
SRC-140-16	-	.140	3.56	.06	1.52	1.00	25.40	1000	n/a
SRC-148-16	-	.148	3.76	.06	1.52	1.00	25.40	1000	200
SRC-156-16	-	.156	3.96	.06	1.52	1.00	25.40	1000	100
SRC-172-16	-	.172	4.37	.06	1.52	1.00	25.40	1000	100
SRC-180-16	-	.180	4.57	.06	1.52	1.00	25.40	1000	200
SRC-187-16	12	.187	4.75	.06	1.52	1.00	25.40	1000	100
SRC-218-16	-	.218	5.54	.06	1.52	1.00	25.40	1000	100
SRC-223-16	-	.223	5.66	.06	1.52	1.00	25.40	1000	200
SRC-234-16	1/4	.234	5.94	.06	1.52	1.00	25.40	1000	100
SRC-250-16	1/4	.250	6.35	.06	1.52	1.00	25.40	1000	100
SRC-281-16	-	.281	7.14	.06	1.52	1.00	25.40	1000	100
SRC-295-24	-	.295	7.49	.06	1.52	1.50	38.10	1000	200
SRC-312-16	5/16	.312	7.92	.06	1.52	1.00	25.40	1000	100
SRC-343-16	-	.340	10.36	.06	1.52	1.00	25.40	1000	100
SRC-355-24	-	.355	9.02	.06	1.52	1.50	38.10	1000	200
SRC-375-16	3/8	.375	9.53	.06	1.52	1.00	25.40	1000	100
SRC-406-16	-	.406	10.31	.06	1.52	1.00	25.40	200	50
SRC-437-16	-	.437	11.10	.06	1.52	1.00	25.40	1000	40
SRC-480-24	-	.480	12.19	.06	1.52	1.50	38.10	200	50
SRC-500-24	-	.500	12.70	.06	1.52	1.50	38.10	200	50
SRC-535-24	-	.535	13.59	.06	1.52	1.50	38.10	200	40
SRC-562-24	-	.562	14.27	.06	1.52	1.50	38.10	200	40
SRC-625-24	-	.625	15.88	.06	1.52	1.50	38.10	200	50
SRC-687-24	-	.687	17.45	.06	1.52	1.50	38.10	200	50
SRC-730-24	-	.730	18.54	.06	1.52	1.50	38.10	200	40
SRC-750-24	-	.750	19.05	.06	1.52	1.50	38.10	200	50
SRC-812-24	-	.812	20.62	.06	1.52	1.50	38.10	200	40
SRC-875-24	-	.875	22.23	.06	1.52	1.50	38.10	200	40
SRC-937-24	-	.937	23.80	.06	1.52	1.50	38.10	200	40
SRC-970-24	-	.970	24.64	.06	1.52	1.50	38.10	100	20
SRC-1000-24	-	1.000	25.40	.06	1.52	1.50	38.10	200	40
SRC-1062-24	-	1.062	26.97	.06	1.52	1.50	38.10	100	20
SRC-1125-24	-	1.125	28.58	.06	1.52	1.50	38.10	100	20
SRC-1187-24	-	1.187	30.15	.06	1.52	1.50	38.10	100	20
SRC-1250-24	-	1.250	31.75	.06	1.52	1.50	38.10	100	20
SRC-1375-24	-	1.375	34.93	.06	1.52	1.50	38.10	100	20
SRC-1500-28	-	1.500	38.10	.06	1.52	1.75	44.45	100	20
SRC-1625-32	-	1.625	41.28	.06	1.52	2.00	50.80	100	20
SRC-1750-24	-	1.750	44.45	.06	1.52	1.50	38.10	100	20
SRC-1875-32	-	1.875	47.63	.06	1.52	2.00	50.80	100	20
SRC-2000-32	-	2.000	50.80	.06	1.52	2.00	50.80	100	20

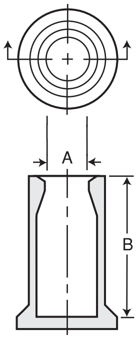




Material: Silicone Rubber **Color*:** Natural

Silicone Rubber Caps are ideal for protecting and masking parts undergoing painting, plating, powder coating, anodizing, abrasive chemical processing, or exposure to high temperatures up to 600ºF (316ºC). Molded from a specially formulated grade of silicone rubber, these caps contain no coloring agents which could bleed under high temperatures. SRC Series Silicone Rubber Caps are especially suited for covering studs, tube ends, and other projections.

ISO 9001:2000 Certified
CERTIFICATE # 08-511



Masking

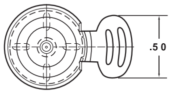
ISO 9001:2000 Certified
CERTIFICATE # 08-511

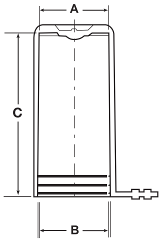
SFC SERIES Silicone Flange Caps

Caplug No.	DIMENSIONS				Packaging	
	A		B		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.		
SFC-157-19	.157	3.99	1.180	29.97	500	100
SFC-187-22	.187	4.75	1.377	34.98	500	100
SFC-234-32	.234	5.94	2.000	50.80	500	100
SFC-294-21	.294	7.47	1.330	33.78	500	100
SFC-315-16	.315	8.00	.974	24.74	250	50
SFC-375-23	.375	9.53	1.421	36.09	100	20
SFC-438-15	.438	11.13	.950	24.13	100	20
SFC-608-19	.608	15.44	1.180	29.97	100	20

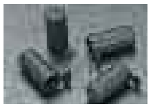
Material: Silicone Rubber **Color*:** Natural

Series SFC Flange Caps feature a design which simplifies the application and removal of the cap. An internal lip on the open end provides a positive seal to prevent paint and other contaminants from seeping onto the part. A flanged head enables the cap to be manually removed with ease. Some sizes have provisions for venting air which keeps the part from unseating during high temperature processes.





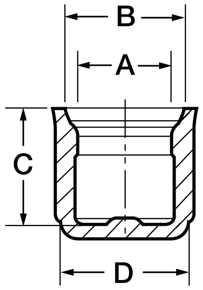
HJS SERIES Flexible Tear-Tab Caps



Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
HJS-582L	.557	14.15	.604	15.34	1.330	33.78	3000	600
HJS-625L	.609	15.47	.601	15.27	1.240	31.50	4000	800

Material: Flex500 **Color*:** Black

Designed to mask fittings during high-temperature finishing processes such as powder coating, e-coating, plating and more. The HJS series is part of our Flex500 line of products designed to withstand temperatures up to and beyond 500ºF. HJS caps were designed to be ergonomically friendly with a soft, flexible feel and a finger grip, making installation and removal of the cap quick and easy. These caps will not bake onto the fitting. The HJS series maintains its flexibility after masking processes giving you the option of removing it after processing, or leaving the cap on as shipping protection, allowing the end-user to remove it.



HCR SERIES High-Temperature Caps

Caplug No.	DIMENSIONS								Packaging	
	A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
HCR-375-8	.404	10.26	.520	13.21	.50	12.70	.55	13.97	5000	1000
HCR-375-14	.404	10.26	.520	13.21	.86	21.84	.55	13.97	5000	1000

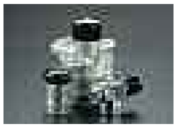
Material: Flex500 **Color*:** Yellow

The HCR are temperature-resistant up to and beyond 500ºF. These sleeves were developed to mask and protect copper tubing during high-temperature masking processes. These caps have outer ribs ensuring ease of installation and removal. A slightly flared open-end allows them to be quickly and easily installed.

Masking

HVC SERIES Flexible Round Caps

Expanded!

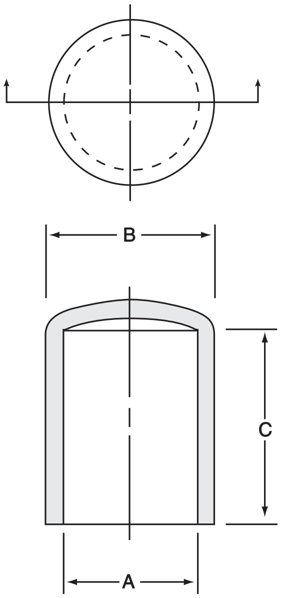


Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
HVC-054-10	.054	1.37	.09	2.29	.625	15.88	5000	n/a	n/a
HVC-062-10	.062	1.57	.12	3.05	.625	15.88	5000	1000	100
HVC-072-10	.072	1.83	.13	3.35	.625	15.88	5000	n/a	n/a
HVC-080-10	.080	2.03	.14	3.56	.625	15.88	5000	1000	100
HVC-093-12	.093	2.36	.15	3.81	.750	19.05	5000	1000	100
HVC-109-12	.109	2.77	.18	4.57	.750	19.05	5000	1000	100
HVC-125-8	.125	3.18	.20	5.08	.500	12.70	5000	n/a	n/a
HVC-125-16	.125	3.18	.20	5.08	1.000	25.40	5000	1000	100
HVC-140-8	.140	3.56	.21	5.33	.500	12.70	5000	n/a	n/a
HVC-140-16	.140	3.56	.21	5.33	1.000	25.40	5000	1000	100
HVC-148-8	.148	3.76	.24	6.30	.500	12.70	5000	n/a	n/a
HVC-148-16	.148	3.76	.24	6.30	1.000	25.40	5000	n/a	n/a
HVC-156-8	.156	3.96	.24	6.10	.500	12.70	5000	n/a	n/a
HVC-156-16	.156	3.96	.24	6.10	1.000	25.40	5000	1000	100
HVC-172-8	.172	4.37	.25	6.35	.500	12.70	5000	n/a	n/a
HVC-172-16	.172	4.37	.25	6.35	1.000	25.40	5000	1000	100
HVC-180-8	.180	4.57	.26	6.60	.500	12.70	5000	n/a	n/a
HVC-180-16	.180	4.57	.26	6.60	1.000	25.40	5000	n/a	n/a
HVC-187-8	.187	4.75	.27	6.86	.500	12.70	5000	n/a	n/a
HVC-187-16	.187	4.75	.27	6.86	1.000	25.40	5000	1000	100
HVC-187-24	.187	4.75	.27	6.86	1.500	38.10	4000	n/a	n/a
HVC-203-8	.203	5.16	.29	7.37	.500	12.70	5000	n/a	n/a
HVC-203-16	.203	5.16	.29	7.37	1.000	25.40	5000	1000	100
HVC-218-8	.218	5.54	.31	7.87	.500	12.70	5000	n/a	n/a
HVC-218-16	.218	5.54	.31	7.87	1.000	25.40	5000	1000	100
HVC-224-8	.224	5.69	.31	7.87	.500	12.70	5000	n/a	n/a
HVC-224-16	.224	5.69	.31	7.87	1.000	25.40	4000	n/a	n/a
HVC-234-8	.234	5.94	.32	8.13	.500	12.70	5000	n/a	n/a
HVC-234-16	.234	5.94	.32	8.13	1.000	25.40	5000	1000	100
HVC-250-8	.250	6.35	.35	8.89	.500	12.70	5000	n/a	n/a
HVC-250-16	.250	6.35	.35	8.89	1.000	25.40	5000	1000	100
HVC-281-8	.281	7.14	.38	9.65	.500	12.70	5000	n/a	n/a
HVC-281-16	.281	7.14	.38	9.65	1.000	25.40	5000	1000	100
HVC-290-8	.290	7.37	.40	10.16	.500	12.70	5000	n/a	n/a
HVC-290-16	.290	7.37	.40	10.16	1.000	25.40	5000	n/a	n/a
HVC-304-8	.304	7.72	.41	10.41	.500	12.70	5000	n/a	n/a
HVC-304-16	.304	7.72	.41	10.41	1.000	25.40	5000	n/a	n/a
HVC-312-8	.312	7.93	.42	10.67	.500	12.70	5000	n/a	n/a
HVC-312-16	.312	7.93	.42	10.67	1.000	25.40	5000	1000	100
HVC-312-24	.312	7.93	.43	10.92	1.500	38.10	2500	n/a	n/a
HVC-343-8	.343	8.71	.45	11.43	.500	12.70	5000	n/a	n/a
HVC-343-16	.343	8.71	.45	11.43	1.000	25.40	2500	500	50
HVC-375-8	.375	9.53	.50	12.70	.500	12.70	5000	n/a	n/a
HVC-375-16	.375	9.53	.50	12.70	1.000	25.40	2500	500	50
HVC-406-8	.406	10.31	.53	13.46	.500	12.70	5000	n/a	n/a
HVC-406-16	.406	10.31	.53	13.46	1.000	25.40	2500	500	50
HVC-437-8	.437	11.10	.56	14.22	.500	12.70	5000	n/a	n/a
HVC-437-16	.437	11.10	.56	14.22	1.000	25.40	2500	500	50
HVC-460-8	.460	11.68	.58	14.73	.500	12.70	5000	n/a	n/a
HVC-460-16	.460	11.68	.58	14.73	1.000	25.40	2500	n/a	n/a
HVC-467-8	.467	11.86	.58	14.73	.500	12.70	5000	n/a	n/a
HVC-467-16	.467	11.86	.58	14.73	1.000	25.40	2500	n/a	n/a
HVC-490-8	.490	12.45	.61	15.49	.500	12.70	5000	n/a	n/a
HVC-490-16	.490	12.45	.61	15.49	1.000	25.40	3000	n/a	n/a
HVC-500-8	.500	12.70	.62	15.75	.500	12.70	5000	n/a	n/a
HVC-500-16	.500	12.70	.62	15.75	1.000	25.40	2500	500	50
HVC-531-8	.531	13.49	.65	16.51	.500	12.70	5000	n/a	n/a
HVC-531-16	.531	13.49	.65	16.51	1.000	25.40	2500	n/a	n/a
HVC-562-8	.562	14.28	.69	17.53	.500	12.70	2500	n/a	n/a
HVC-562-16	.562	14.28	.69	17.53	1.000	25.40	2000	n/a	n/a
HVC-600-8	.600	15.24	.73	18.54	.500	12.70	3000	n/a	n/a
HVC-600-16	.600	15.24	.73	18.54	1.000	25.40	2000	n/a	n/a

† Mini and Micro Paks available in standard color.

‡ Minimum order for Micro Paks is 2.

HVC Series continues on next page



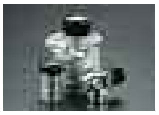
Material: Flex500 **Color*:** Black **Standard Option Color:** Yellow

Series HVC temperature-resistant caps are extremely flexible closures which are ideal for use as thread protectors, dust covers, moisture seals and more. Flex500 is an innovative material specially formulated to withstand temperatures 500ºF and beyond. HVC caps are ideal for masking applications including powder coating, e-coating, painting and more.

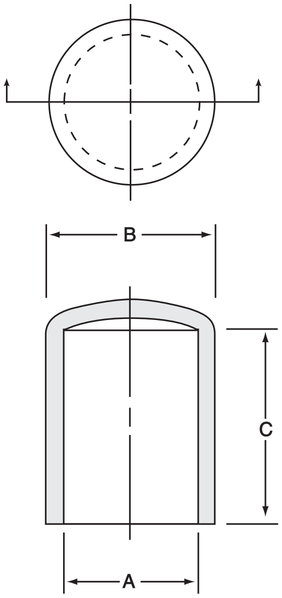
ISO 9001:2000 Certified
CERTIFICATE # 08-511

Masking

Expanded!



HVC SERIES Flexible Round Caps (continued)



Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
HVC-625-8	.625	15.88	.76	19.30	.500	12.70	2500	n/a	n/a
HVC-625-16	.625	15.88	.76	19.30	1.000	25.40	2000	400	50
HVC-625-24	.625	15.88	.77	19.56	1.500	38.10	1500	n/a	n/a
HVC-640-8	.640	16.26	.77	19.56	.500	12.70	4000	n/a	n/a
HVC-640-16	.640	16.26	.77	19.56	1.000	25.40	2000	n/a	n/a
HVC-665-8	.665	16.89	.80	20.32	.500	12.70	4000	n/a	n/a
HVC-665-16	.665	16.89	.80	20.32	1.000	25.40	2000	n/a	n/a
HVC-687-8	.687	17.45	.81	20.57	.500	12.70	2500	n/a	n/a
HVC-687-16	.687	17.45	.81	20.57	1.000	25.40	1000	n/a	n/a
HVC-690-8	.690	17.53	.82	20.83	.500	12.70	2500	n/a	n/a
HVC-690-16	.690	17.53	.82	20.83	1.000	25.40	1000	n/a	n/a
HVC-725-8	.725	18.42	.86	21.84	.500	12.70	2500	n/a	n/a
HVC-725-16	.725	18.42	.86	21.84	1.000	25.40	1000	n/a	n/a
HVC-750-8	.750	19.05	.88	22.35	.500	12.70	2500	n/a	n/a
HVC-750-16	.750	19.05	.88	22.35	1.000	25.40	1000	200	25
HVC-812-8	.812	20.63	.94	23.88	.500	12.70	2500	n/a	n/a
HVC-812-16	.812	20.63	.94	23.88	1.000	25.40	1000	n/a	n/a
HVC-812-24	.812	20.63	.95	24.13	1.500	38.10	1000	n/a	n/a
HVC-843-8	.843	21.41	.98	24.89	.500	12.70	2500	n/a	n/a
HVC-843-16	.843	21.41	.98	24.89	1.000	25.40	1000	n/a	n/a
HVC-870-8	.870	22.10	1.01	25.65	.500	12.70	1000	n/a	n/a
HVC-870-16	.870	22.10	1.01	25.65	1.000	25.40	1000	n/a	n/a
HVC-875-8	.875	22.23	1.02	25.91	.500	12.70	2500	n/a	n/a
HVC-875-16	.875	22.23	1.02	25.91	1.000	25.40	1000	200	25
HVC-875-24	.875	22.23	1.02	25.91	1.500	38.10	1000	n/a	n/a
HVC-937-8	.937	23.80	1.08	27.43	.500	12.70	2000	n/a	n/a
HVC-937-16	.937	23.80	1.08	27.43	1.000	25.40	1000	n/a	n/a
HVC-985-8	.985	25.02	1.13	28.70	.500	12.70	2000	n/a	n/a
HVC-985-16	.985	25.02	1.13	28.70	1.000	25.40	1000	n/a	n/a
HVC-1000-8	1.000	25.40	1.14	28.96	.500	12.70	1000	n/a	n/a
HVC-1000-16	1.000	25.40	1.14	28.96	1.000	25.40	1000	200	25
HVC-1000-24	1.000	25.40	1.14	28.96	1.500	38.10	1000	n/a	n/a
HVC-1062-16	1.062	26.97	1.20	30.48	1.000	25.40	1200	n/a	n/a
HVC-1090-16	1.090	27.69	1.22	30.99	1.000	25.40	1200	n/a	n/a
HVC-1125-16	1.125	28.57	1.27	32.26	1.000	25.40	500	n/a	n/a
HVC-1187-16	1.187	30.14	1.33	33.78	1.000	25.40	500	n/a	n/a
HVC-1250-16	1.250	31.75	1.39	35.31	1.000	25.40	500	n/a	n/a
HVC-1250-24	1.250	31.75	1.39	35.31	1.500	38.10	500	n/a	n/a
HVC-1312-16	1.312	33.32	1.45	36.83	1.000	25.40	1000	n/a	n/a
HVC-1312-24	1.312	33.32	1.45	36.83	1.500	38.10	600	n/a	n/a
HVC-1375-16	1.375	34.92	1.52	38.61	1.000	25.40	500	n/a	n/a
HVC-1375-24	1.375	34.92	1.52	38.61	1.500	38.10	400	n/a	n/a
HVC-1437-16	1.437	36.50	1.58	40.06	1.000	25.40	750	n/a	n/a
HVC-1500-16	1.500	38.10	1.64	41.66	1.000	25.40	500	n/a	n/a
HVC-1500-24	1.500	38.10	1.64	41.66	1.500	38.10	300	n/a	n/a
HVC-1593-16	1.593	40.46	1.72	43.76	1.000	25.40	500	n/a	n/a
HVC-1625-16	1.625	41.27	1.77	44.96	1.000	25.40	500	n/a	n/a
HVC-1687-16	1.687	42.84	1.83	46.48	1.000	25.40	500	n/a	n/a
HVC-1750-16	1.750	44.45	1.89	48.01	1.000	25.40	500	n/a	n/a
HVC-1812-16	1.812	46.02	1.95	49.58	1.000	25.40	1000	n/a	n/a
HVC-1875-16	1.875	47.62	2.02	51.31	1.000	25.40	250	n/a	n/a
HVC-1937-16	1.937	49.20	2.07	52.76	1.000	25.40	600	n/a	n/a
HVC-2000-16	2.000	50.80	2.14	54.36	1.000	25.40	250	n/a	n/a
HVC-2000-24	2.000	50.80	2.14	54.36	1.500	38.10	300	n/a	n/a
HVC-2125-16	2.125	53.98	2.27	57.79	1.000	25.40	500	n/a	n/a
HVC-2156-16	2.156	54.76	2.30	58.57	1.000	25.40	500	n/a	n/a
HVC-2250-16	2.250	57.15	2.40	60.96	1.000	25.40	500	n/a	n/a
HVC-2250-24	2.250	57.15	2.40	60.96	1.500	38.10	300	n/a	n/a
HVC-2375-16	2.375	59.56	2.52	64.14	1.000	25.40	200	n/a	n/a
HVC-2375-24	2.375	59.56	2.52	64.14	1.500	38.10	250	n/a	n/a
HVC-2460-16	2.460	62.48	2.61	66.29	1.000	25.40	250	n/a	n/a
HVC-2500-16	2.500	63.50	2.65	67.31	1.000	25.40	400	n/a	n/a
HVC-2500-24	2.500	63.50	2.65	67.31	1.500	38.10	250	n/a	n/a
HVC-2625-16	2.625	66.67	2.77	70.49	1.000	25.40	400	n/a	n/a
HVC-2625-24	2.625	66.67	2.77	70.49	1.500	38.10	200	n/a	n/a
HVC-2687-16	2.687	68.25	2.84	72.31	1.000	25.40	400	n/a	n/a
HVC-2750-16	2.750	69.85	2.91	73.91	1.000	25.40	300	n/a	n/a
HVC-2750-24	2.750	69.85	2.91	73.91	1.500	38.10	200	n/a	n/a
HVC-2875-16	2.875	73.03	3.03	77.09	1.000	25.40	250	n/a	n/a
HVC-3000-16	3.000	76.20	3.16	80.26	1.000	25.40	250	n/a	n/a
HVC-3000-24	3.000	76.20	3.16	80.26	1.500	38.10	250	n/a	n/a

† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

HVC Series continues on next page

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Masking

HVC SERIES Flexible Round Caps (continued)

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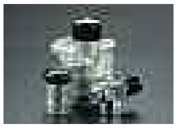
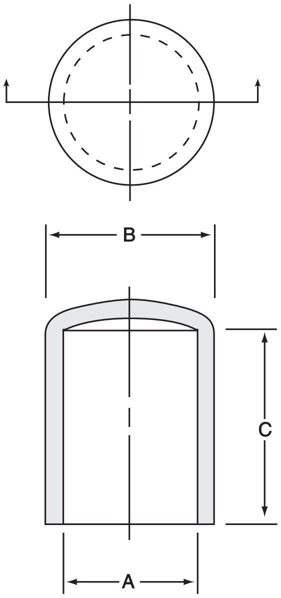
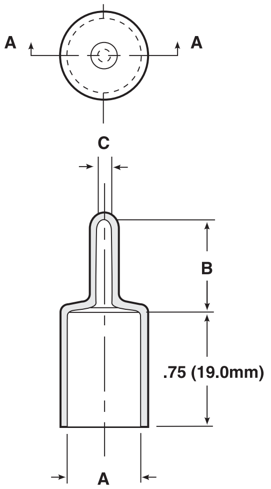


Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
HVC-3125-16	3.125	79.37	3.285	83.44	1.000	25.40	250	n/a	n/a
HVC-3125-24	3.125	79.37	3.285	83.44	1.500	38.10	300	n/a	n/a
HVC-3250-18	3.250	82.55	3.410	86.61	1.125	28.58	200	n/a	n/a
HVC-3375-18	3.375	85.73	3.535	89.79	1.125	28.58	250	n/a	n/a
HVC-3500-18	3.500	88.90	3.660	92.96	1.125	28.58	225	n/a	n/a
HVC-3500-24	3.500	88.90	3.660	92.96	1.500	38.10	200	n/a	n/a
HVC-3625-18	3.625	92.08	3.785	96.14	1.125	28.58	200	n/a	n/a
HVC-3750-18	3.750	92.25	3.910	99.31	1.125	28.58	200	n/a	n/a
HVC-3875-18	3.875	98.43	4.035	102.49	1.125	28.58	200	n/a	n/a
HVC-4000-20	4.000	101.60	4.160	105.66	1.250	31.75	100	n/a	n/a
HVC-4125-20	4.125	104.78	4.285	108.84	1.250	31.75	150	n/a	n/a
HVC-4187-20	4.187	106.35	4.347	110.41	1.250	31.75	100	n/a	n/a
HVC-4250-20	4.250	107.95	4.410	112.01	1.250	31.75	150	n/a	n/a
HVC-4375-20	4.375	111.13	4.535	115.19	1.250	31.75	150	n/a	n/a
HVC-4500-20	4.500	114.30	4.660	118.36	1.250	31.75	150	n/a	n/a
HVC-4750-20	4.750	120.65	4.910	124.71	1.250	31.75	100	n/a	n/a
HVC-5000-22	5.000	127.00	5.180	131.57	1.375	34.93	125	n/a	n/a
HVC-5187-22	5.187	131.75	5.367	136.32	1.375	34.93	125	n/a	n/a
HVC-5375-22	5.375	136.53	5.555	141.10	1.375	34.93	100	n/a	n/a
HVC-5500-22	5.500	139.70	5.680	144.27	1.375	34.93	100	n/a	n/a
HVC-5750-22	5.750	146.05	5.930	150.62	1.375	34.93	50	n/a	n/a
HVC-6000-24	6.000	152.40	6.180	156.97	1.500	38.10	90	n/a	n/a
HVC-6250-24	6.250	158.75	6.430	163.32	1.500	38.10	90	n/a	n/a
HVC-6500-24	6.500	165.10	6.680	169.67	1.500	38.10	80	n/a	n/a
HVC-6750-24	6.750	171.45	6.930	176.02	1.500	38.10	70	n/a	n/a
HVC-7000-24	7.000	177.80	7.180	182.37	1.500	38.10	50	n/a	n/a
HVC-7250-24	7.250	184.15	7.430	188.72	1.500	38.10	70	n/a	n/a
HVC-7500-24	7.500	190.50	7.680	195.07	1.500	38.10	50	n/a	n/a
HVC-7750-28	7.750	196.85	7.930	201.42	1.750	44.45	50	n/a	n/a
HVC-8000-28	8.000	203.20	8.180	207.77	1.750	44.45	50	n/a	n/a
HVC-8500-28	8.500	215.90	8.680	220.47	1.750	44.45	50	n/a	n/a
HVC-8750-28	8.750	222.25	8.930	226.82	1.750	44.45	50	n/a	n/a
HVC-9000-28	9.000	228.60	9.200	233.68	1.750	44.45	40	n/a	n/a
HVC-9250-28	9.250	234.95	9.450	240.03	1.750	44.45	40	n/a	n/a
HVC-9375-28	9.375	238.13	9.575	243.21	1.750	44.45	40	n/a	n/a
HVC-9500-28	9.500	241.30	9.700	246.38	1.750	44.45	40	n/a	n/a
HVC-9625-28	9.625	244.48	9.825	249.56	1.750	44.45	40	n/a	n/a
HVC-9875-28	9.875	250.83	10.075	255.91	1.750	44.45	40	n/a	n/a
HVC-10000-32	10.000	254.00	10.200	259.08	2.000	50.80	35	n/a	n/a
HVC-10312-32	10.312	261.92	10.512	267.00	2.000	50.80	25	n/a	n/a
HVC-10750-32	10.750	273.05	10.950	278.13	2.000	50.80	25	n/a	n/a
HVC-11000-32	11.000	279.40	11.200	284.48	2.000	50.80	25	n/a	n/a
HVC-11375-32	11.375	288.93	11.575	294.01	2.000	50.80	25	n/a	n/a
HVC-11750-32	11.750	298.45	11.950	303.53	2.000	50.80	25	n/a	n/a
HVC-12000-32	12.000	304.80	12.200	309.88	2.000	50.80	25	n/a	n/a
HVC-12250-32	12.250	311.15	12.450	316.23	2.000	50.80	25	n/a	n/a
HVC-12500-32	12.500	317.50	12.700	322.58	2.000	50.80	25	n/a	n/a
HVC-12625-32	12.625	320.68	12.825	325.76	2.000	50.80	25	n/a	n/a
HVC-12875-32	12.875	327.03	13.075	332.11	2.000	50.80	25	n/a	n/a
HVC-13250-32	13.250	336.55	13.470	342.14	2.000	50.80	25	n/a	n/a
HVC-13500-32	13.500	342.90	13.720	348.49	2.000	50.80	25	n/a	n/a
HVC-13600-32	13.600	345.44	13.820	351.03	2.000	50.80	25	n/a	n/a
HVC-14000-32	14.000	355.60	14.220	361.19	2.000	50.80	18	n/a	n/a
HVC-14250-32	14.250	361.95	14.470	367.54	2.000	50.80	25	n/a	n/a
HVC-14500-32	14.500	368.30	14.720	373.89	2.000	50.80	25	n/a	n/a
HVC-15000-32	15.000	381.00	15.220	386.59	2.000	50.80	25	n/a	n/a
HVC-15625-32	15.625	396.88	15.845	402.46	2.000	50.80	25	n/a	n/a
HVC-15875-32	15.875	403.23	16.115	409.32	2.000	50.80	25	n/a	n/a
HVC-16000-32	16.000	406.40	16.240	412.50	2.000	50.80	25	n/a	n/a
HVC-16500-32	16.500	419.10	16.740	425.20	2.000	50.80	20	n/a	n/a
HVC-17375-40	17.375	441.33	17.615	447.42	2.500	63.50	20	n/a	n/a
HVC-18000-40	18.000	457.20	18.240	463.30	2.500	63.50	15	n/a	n/a
HVC-19000-40	19.000	482.60	19.240	488.70	2.500	63.50	15	n/a	n/a
HVC-20000-40	20.000	508.00	20.240	514.10	2.500	63.50	15	n/a	n/a
HVC-21000-40	21.000	533.40	21.240	539.50	2.500	63.50	15	n/a	n/a
HVC-24000-48	24.000	609.60	24.240	615.70	3.000	76.20	15	n/a	n/a

† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.





Masking

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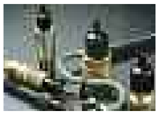

HEZ SERIES Flexible Caps with Pull-Tab for Easy Removal

Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
HEZ-187-12	.187	4.74	.500	12.70	.093	2.36	5000	n/a	n/a
HEZ-215-12	.215	5.46	.500	12.70	.093	2.36	5000	n/a	n/a
HEZ-240-12	.240	6.09	.625	15.87	.125	3.17	4000	800	50
HEZ-303-12	.303	7.69	.625	15.87	.125	3.17	4000	800	50
HEZ-365-12	.365	9.27	.625	15.87	.125	3.17	3500	700	50
HEZ-386-12	.386	9.80	.625	15.87	.125	3.17	4000	n/a	n/a
HEZ-406-12	.406	10.31	.625	15.87	.125	3.17	4000	n/a	n/a
HEZ-427-12	.427	10.84	.625	15.87	.125	3.17	3000	n/a	n/a
HEZ-460-12	.460	11.68	.500	12.70	.100	2.54	2500	n/a	n/a
HEZ-490-12	.490	12.44	.687	17.44	.125	3.17	2500	500	50
HEZ-521-12	.521	13.23	.625	15.88	.125	3.17	2500	n/a	n/a
HEZ-552-12	.552	14.02	.687	17.44	.125	3.17	2000	500	50
HEZ-600-12	.600	15.24	.812	20.62	.187	4.75	2000	n/a	n/a
HEZ-615-12	.615	15.62	.687	17.44	.125	3.17	2000	400	50
HEZ-655-12	.655	16.63	.875	22.22	.187	4.75	2000	n/a	n/a
HEZ-670-12	.670	17.02	.800	20.32	.190	4.83	2000	n/a	n/a
HEZ-677-12	.677	17.19	.812	20.62	.187	4.75	2000	n/a	n/a
HEZ-695-12	.695	17.65	.812	20.62	.187	4.75	1500	n/a	n/a
HEZ-735-12	.735	18.66	.812	20.62	.187	4.74	1500	300	25
HEZ-760-12	.760	19.30	.800	20.32	.190	4.83	2000	n/a	n/a
HEZ-797-12	.797	20.24	.812	20.62	.187	4.75	1500	n/a	n/a
HEZ-835-12	.835	21.20	.843	21.41	.187	4.74	1500	n/a	n/a
HEZ-860-12	.860	21.84	.843	21.41	.187	4.74	1500	300	25
HEZ-922-12	.922	23.41	.875	22.22	.187	4.74	1000	n/a	n/a
HEZ-985-12	.985	25.01	.875	22.22	.187	4.74	1000	250	25
HEZ-1048-12	1.048	27.53	1.000	25.40	.187	4.74	1000	n/a	n/a
HEZ-1110-12	1.110	28.19	1.125	28.58	.187	4.74	1000	n/a	n/a
HEZ-1175-12	1.175	29.85	.750	19.05	.325	8.26	1000	n/a	n/a
HEZ-1230-12	1.230	31.24	1.125	28.58	.187	4.74	900	n/a	n/a
HEZ-1355-12	1.355	34.41	1.125	28.58	.250	6.35	800	n/a	n/a
HEZ-1480-12	1.480	37.59	1.000	25.40	.250	6.35	800	n/a	n/a

Material: Flex500 **Color*:** Black **Standard Option Color:** Yellow

Series HEZ are temperature-resistant caps with a long tab centered at the top of the closure, which allows the cap to be manually removed easily, eliminating the use of tools which could damage threads or part surfaces. Flex500 is an innovative material specially formulated to withstand temperatures 500ºF and beyond. HEZ caps are ideal for masking applications including powder coating, e-coating, painting and more.

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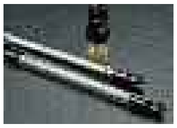
Masking

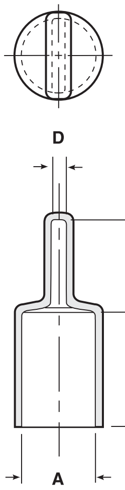
Expanded!



HFC SERIES Flexible Caps with Flat Pull-Tab for Easy Removal

Caplug No.	DIMENSIONS								Packaging		
	A		B		C		D		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.			
HFC-180-8	.180	4.57	.500	12.70	.500	12.70	.062	1.57	5000	n/a	n/a
HFC-180-16	.180	4.57	.500	12.70	1.000	25.40	.062	1.57	5000	1000	100
HFC-207-8	.207	5.25	.625	15.88	.500	12.70	.125	3.18	5000	n/a	n/a
HFC-207-16	.207	5.25	.625	15.88	1.000	25.40	.125	3.18	5000	n/a	n/a
HFC-240-8	.240	6.09	.625	15.88	.500	12.70	.125	3.18	5000	n/a	n/a
HFC-240-16	.240	6.09	.625	15.88	1.000	25.40	.125	3.18	5000	n/a	n/a
HFC-302-8	.302	7.67	.625	15.88	.500	12.70	.125	3.18	4000	n/a	n/a
HFC-302-16	.302	7.67	.625	15.88	1.000	25.40	.125	3.18	4000	n/a	n/a
HFC-365-8	.365	9.27	.625	15.88	.500	12.70	.125	3.18	5000	n/a	n/a
HFC-365-12	.365	9.27	.625	15.88	.750	19.05	.125	3.18	3000	n/a	n/a
HFC-365-16	.365	9.27	.625	15.88	1.000	25.40	.125	3.18	2500	n/a	n/a
HFC-396-8	.396	10.05	.625	15.88	.500	12.70	.125	3.18	3000	n/a	n/a
HFC-396-16	.396	10.05	.625	15.88	1.000	25.40	.125	3.18	3000	n/a	n/a
HFC-410-8	.410	10.41	.687	17.45	.500	12.70	.125	3.18	3000	n/a	n/a
HFC-410-16	.410	10.41	.687	17.45	1.000	25.40	.125	3.18	2000	400	50
HFC-427-8	.427	10.84	.625	15.88	.500	12.70	.125	3.18	3000	n/a	n/a
HFC-427-16	.427	10.84	.625	15.88	1.000	25.40	.125	3.18	2500	500	50
HFC-470-8	.470	11.93	.625	15.88	.500	12.70	.125	3.18	2000	n/a	n/a
HFC-470-16	.470	11.93	.625	15.88	1.000	25.40	.125	3.18	2000	n/a	n/a
HFC-490-8	.490	12.44	.625	15.88	.500	12.70	.125	3.18	2500	n/a	n/a
HFC-490-16	.490	12.44	.625	15.88	1.000	25.40	.125	3.18	1500	n/a	n/a
HFC-521-8	.521	13.23	.625	15.88	.500	12.70	.125	3.18	2000	n/a	n/a
HFC-521-16	.521	13.23	.625	15.88	1.000	25.40	.125	3.18	1500	300	50
HFC-552-8	.552	14.02	.687	17.45	.500	12.70	.125	3.18	3000	n/a	n/a
HFC-552-12	.552	14.02	.687	17.45	.750	19.05	.125	3.18	2000	n/a	n/a
HFC-552-16	.552	14.02	.687	17.45	1.000	25.40	.125	3.18	1500	n/a	n/a
HFC-590-8	.590	14.98	.625	15.88	.500	12.70	.125	3.18	1500	n/a	n/a
HFC-590-16	.590	14.98	.625	15.88	1.000	25.40	.125	3.18	1500	300	50
HFC-615-8	.615	15.62	.687	17.45	.500	12.70	.125	3.18	2000	n/a	n/a
HFC-615-16	.615	15.62	.687	17.45	1.000	25.40	.125	3.18	2000	n/a	n/a
HFC-677-8	.677	17.19	.687	17.45	.500	12.70	.125	3.18	1000	n/a	n/a
HFC-677-16	.677	17.19	.687	17.45	1.000	25.40	.125	3.18	1000	200	25
HFC-735-8	.735	18.66	.812	20.63	.500	12.70	.187	4.75	700	n/a	n/a
HFC-735-12	.735	18.66	.812	20.63	.750	19.05	.187	4.75	1250	n/a	n/a
HFC-735-16	.735	18.66	.812	20.63	1.000	25.40	.187	4.75	1000	n/a	n/a
HFC-797-8	.797	20.24	.812	20.63	.500	12.70	.187	4.75	900	n/a	n/a
HFC-797-16	.797	20.24	.812	20.63	1.000	25.40	.187	4.75	900	180	20
HFC-865-8	.865	21.97	.843	21.41	.500	12.70	.187	4.75	1000	n/a	n/a
HFC-865-16	.865	21.97	.843	21.41	1.000	25.40	.187	4.75	2500	n/a	n/a
HFC-990-8	.990	25.14	.875	22.23	.500	12.70	.187	4.75	600	n/a	n/a
HFC-990-16	.990	25.14	.875	22.23	1.000	25.40	.187	4.75	600	120	20
HFC-1230-16	1.230	31.24	1.125	28.58	1.000	25.40	.187	4.75	500	n/a	n/a
HFC-1230-24	1.230	31.24	1.125	28.58	1.500	38.10	.187	4.75	500	n/a	n/a
HFC-1605-16	1.605	40.76	1.250	31.75	1.000	25.40	.250	6.35	400	n/a	n/a
HFC-1605-24	1.605	40.76	1.250	31.75	1.500	38.10	.250	6.35	400	n/a	n/a

† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.



Material: Flex500 **Color*:** Black **Standard Option Color:** Yellow

Series HFC are temperature-resistant caps with a long flat tab centered at the top of the closure, which allows for easy installation and removal. Flex500 is an innovative material specially formulated to withstand temperatures 500ºF and beyond. HFC caps are ideal for masking applications including powder coating, e-coating, painting and more.

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Masking

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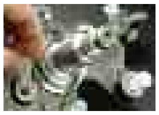
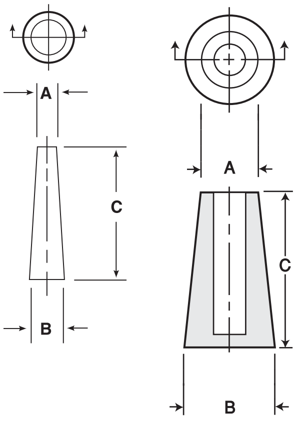
SRP SERIES Silicone Rubber Plugs



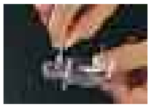


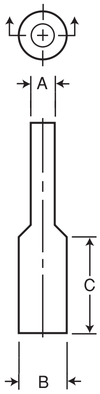
Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	+/-.020 in.	+/-.51 mm	+/-.010 In	+/-.25 mm	+/-.020 in.	+/-.51 mm.		
SRP-063-10	.016	.41	.062	1.89	.625	15.88	1000	200
SRP-078-16	.020	.51	.078	1.98	1.000	25.40	1000	200
SRP-100-10	.031	.79	.100	2.54	.625	15.88	1000	200
SRP-125-10	.062	1.89	.125	3.18	.625	15.88	1000	200
SRP-188-10	.062	1.89	.019	.57	.625	15.88	1000	200
SRP-250-12	.125	3.18	.250	6.35	.750	19.05	1000	200
SRP-344-10	.188	4.78	.344	8.74	.625	15.88	1000	100
SRP-375-12	.250	6.35	.375	9.53	.750	19.05	1000	100
SRP-438-16	.250	6.35	.438	11.13	1.000	25.40	1000	200
SRP-469-13	.344	8.74	.469	11.91	.813	20.65	400	80
SRP-500-32	.125	3.18	.500	12.70	2.000	50.80	200	40
SRP-594-16	.039	1.20	.590	17.98	1.000	25.40	400	80
SRP-687-16	.438	11.13	.687	17.45	1.000	25.40	200	25
SRP-750-16	.563	14.30	.750	19.05	1.000	25.40	100	20
SRP-781-16	.630	19.20	.787	23.99	1.000	25.40	100	20
SRP-938-16	.719	18.26	.938	23.83	1.000	25.40	100	20
SRP-1000-16	.787	19.99	1.024	26.01	1.000	25.40	100	20
SRP-1063-16	.905	22.99	1.063	27.00	1.000	25.40	100	20
SRP-1100-16	.938	23.83	1.100	27.94	1.000	25.40	100	20
SRP-1250-16	1.031	26.19	1.250	31.75	1.000	25.40	100	20
SRP-1438-16H	1.180	35.97	1.438	36.53	1.000	25.40	50	10
SRP-1531-16	1.250	31.75	1.531	38.89	1.000	25.40	100	20
SRP-1625-16H	1.313	33.35	1.625	41.28	1.000	25.40	50	n/a
SRP-1750-16H	1.457	44.41	1.772	54.01	1.000	25.40	50	n/a
SRP-1969-16H	1.625	49.53	1.969	50.01	1.000	25.40	25	n/a
SRP-2063-16	1.750	44.45	2.063	52.40	1.000	25.40	50	n/a
SRP-2203-16H	1.875	47.63	2.203	55.96	1.000	25.40	25	n/a
SRP-2469-16H	1.969	50.01	2.469	62.71	1.000	25.40	50	n/a
SRP-2500-16H	2.125	53.98	2.520	76.81	1.000	25.40	25	n/a
SRP-2688-16H	2.281	57.94	2.688	68.28	1.000	25.40	25	n/a

Material: Silicone Rubber **Color*:** Natural

SRP Series Plugs have a tapered design for ease in plugging ports and holes in parts undergoing painting, plating, powder coating, anodizing, abrasive chemical processing, or exposure to high temperatures up to 600ºF (316ºC). Smaller sizes are solid while larger parts (Caplug No. with an H suffix) have a hollow design.

SPP SERIES Silicone Rubber Pull Plugs





Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	+/-.020 in.	+/-.51 mm	+/-.010 In	+/-.25 mm	+/-.020 in.	+/-.51 mm.		
SPP-091-10	.052	1.32	.091	2.31	.625	15.88	1000	200
SPP-109-16	.062	1.57	.109	2.77	1.000	25.40	1000	200
SPP-125-10	.062	1.57	.125	3.18	.625	15.88	500	100
SPP-130-10	.093	2.36	.130	3.30	.650	16.51	500	100
SPP-142-10	.085	2.16	.142	3.61	.625	15.88	500	100
SPP-156-10	.062	1.57	.156	3.96	.625	15.88	500	100
SPP-187-10	.110	2.79	.187	4.75	.620	15.75	500	100
SPP-197-16	.110	2.79	.197	5.00	1.000	25.40	500	100
SPP-225-16	.125	3.18	.225	5.71	1.000	25.40	500	100
SPP-257-16	.130	3.30	.257	6.53	1.000	25.40	500	100
SPP-275-15	.125	3.18	.275	6.99	.937	23.80	1000	200
SPP-312-20	.152	3.86	.312	7.92	1.250	31.75	200	40
SPP-335-16	.153	3.89	.335	8.51	1.000	25.40	200	40

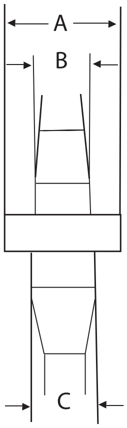
Material: Silicone Rubber **Color*:** Natural

SPP Series Pull Plugs are designed to provide complete and positive protection to female-threaded ports and to the inside walls of holes ranging from .09" diameter to .33" and in lengths from .62" to 1.00".

Masking

SWP SERIES Silicone Washer Plugs

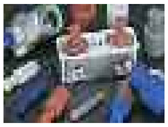
Caplug No.	DIMENSIONS						Packaging	
	A		B		C		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.		
SWP-130-250-140	.250	6.35	.130	3.30	.140	3.56	1000	200
SWP-140-250-180	.250	6.35	.140	3.56	.180	4.57	1000	200
SWP-130-312-150	.312	7.92	.130	3.30	.150	3.81	1000	200
SWP-140-312-180	.312	7.92	.140	3.56	.180	4.57	1000	200
SWP-155-312-230	.312	7.92	.155	3.94	.230	5.84	500	100
SWP-200-312-230	.312	7.92	.200	5.08	.230	5.84	500	100
SWP-130-375-150	.375	9.53	.130	3.30	.150	3.81	1000	200
SWP-140-375-200	.375	9.53	.140	3.56	.200	5.08	500	100
SWP-180-375-180	.375	9.53	.180	4.57	.180	4.57	500	100
SWP-238-375-250	.375	9.53	.238	6.05	.250	6.35	500	100
SWP-238-500-250	.500	12.70	.238	6.05	.250	6.35	250	50
SWP-275-500-375	.500	12.70	.275	6.99	.375	9.53	250	50



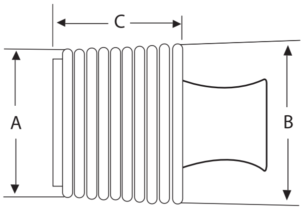
Material: Silicone Rubber **Color*:** Natural

SWP Series silicone washer plugs are designed for masking around a hole for grounding purposes or can be used as dual plugs. Made of silicone, the SWP Series is excellent for high-temperature applications up to 600ºF (intermittent).

SFL SERIES Silicone Flangeless Plugs



Caplug No.	Color	DIMENSIONS						Packaging	
		A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
SFL-157-236	Natural	.157	3.99	.236	5.99	1.00	25.40	1000	200
SFL-236-315	Gray	.236	5.99	.315	8.00	1.00	25.40	1000	200
SFL-315-394	Yellow	.315	8.00	.394	10.01	1.00	25.40	1000	200
SFL-394-472	Blue	.394	10.01	.472	11.99	1.00	25.40	500	100
SFL-472-551	Natural	.472	11.99	.551	14.00	1.00	25.40	500	100
SFL-551-630	Gray	.551	14.00	.630	16.00	1.00	25.40	200	40
SFL-630-709	Rust	.630	16.00	.709	18.01	1.00	25.40	200	40
SFL-709-787	Blue	.709	18.01	.787	19.99	1.00	25.40	200	40
SFL-787-886	Natural	.747	18.97	.846	21.49	1.00	25.40	200	40
SFL-886-945	Gray	.886	22.50	.945	24.00	1.00	25.40	200	40
SFL-945-1024	Rust	.945	24.00	1.024	26.01	1.00	25.40	100	20
SFL-1024-1102	Blue	1.024	26.01	1.102	27.99	1.00	25.40	100	20
SFL-1102-1125	Green	1.102	27.99	1.125	28.58	1.00	25.40	100	20
SFL-1125-1250	Green	1.125	28.58	1.250	31.75	1.00	25.40	100	20



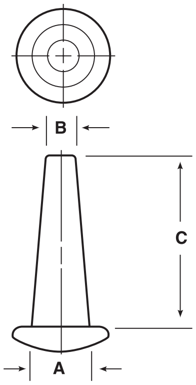
Material: Silicone Rubber **Color*:** See Chart

SFL Series silicone flangeless plugs are designed to mask threaded holes without masking the surrounding area while undergoing painting, plating, powder coating, anodizing, abrasive chemical processing, or exposure to high temperatures. The tapered design allows for many different size holes to be masked using one size plug, and also offers a pull-tab for easy removal. The SFL Series is available in an assortment of colors for easy identification.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Masking

HTP SERIES Flexible Tapered Plugs



Caplug No.	DIMENSIONS						Packaging		
	A		B		C		Carton Quant.	Mini Pak† Quant.	Micro Pak‡ Quant.
	in.	mm.	in.	mm.	in.	mm.			
HTP-4	.15	3.81	.07	1.78	.625	15.88	5000	1000	50
HTP-6	.20	5.08	.10	2.54	.500	12.70	5000	1000	50
HTP-8	.25	6.35	.14	3.56	.750	19.05	5000	1000	50
HTP-9	.30	7.62	.14	3.56	1.000	25.40	5000	1000	50
HTP-10	.31	7.87	.16	4.06	.750	19.05	5000	1000	50
HTP-11	.31	7.87	.19	4.83	1.000	25.40	5000	1000	50
HTP-12	.34	8.64	.19	4.83	.750	19.05	5000	1000	50

† Mini and Micro Paks available in standard color.
‡ Minimum order for Micro Paks is 2.

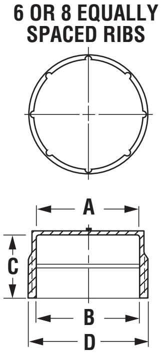
Material: Flex500 **Color*:** Black **Standard Option Color:** Yellow

Series HTP are temperature-resistant plugs designed with a distinct tapered configuration making them ideal for plugging small holes ranging in diameter from .070" to .343". Flex500 is an innovative material specially formulated to withstand temperatures 500ºF and beyond. HTP plugs are ideal for masking applications including powder coating, e-coating, painting and more.

Tubing & Packaging - Tube Ends

Packaging Caps

Caplug No.	DIMENSIONS								Packaging	
	A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
288-1	.380	9.65	.387	9.83	.37	9.40	.50	12.70	20000	4000
288-2	.468	11.89	.474	12.04	.44	11.18	.58	14.73	10000	2000
288-3	.603	15.32	.610	15.49	.50	12.70	.73	18.54	7500	1500
288-4	.722	18.34	.729	18.52	.56	14.22	.84	21.34	4500	900
288-5	.843	21.41	.850	21.59	.60	15.24	.96	24.38	3000	600
288-6	1.108	28.14	1.115	28.32	.66	16.76	1.22	30.99	1500	300
288-7	1.498	38.05	1.515	38.48	.75	19.05	1.65	41.91	1000	200
288-8	1.871	47.52	1.903	48.34	.75	19.05	2.03	51.56	500	100
288-9	2.375	60.33	2.387	60.63	.75	19.05	2.52	64.01	900	180



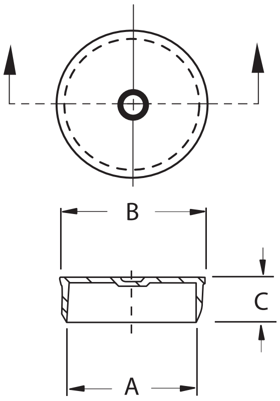
Material: Low-Density Polyethylene **Color*:** Orange

These packaging caps have molded rings on the interior surface to ensure a snug fit into the tube. Designed primarily for cardboard mailing and packaging tubes, these fit most standard tube sizes. A ribbed exterior assists in removal.

Expanded!

TE SERIES Tube End Plugs

Caplug No.	Fits Tube Size	DIMENSIONS						Packaging	
		A		B		C		Carton Quant.	Mini Pak Quant.
		in.	mm.	in.	mm.	in.	mm.		
TE-500	TRO/TRC-500	.553	14.04	.600	15.23	.320	8.12	5000	1000
TE-625	TRO/TRC-625	.719	18.26	.770	19.55	.320	8.12	5000	1000
TE-750	TRO/TRC-750	.813	20.64	.860	21.84	.320	8.12	5000	1000
TE-875	TRO/TRC-875	.949	24.10	1.000	25.39	.320	8.12	5000	1000
TE-937	TRO/TRC-937	1.034	26.25	1.060	26.91	.380	9.65	5000	1000
TE-1000	TRO/TRC-1000	1.105	28.06	1.140	28.94	.380	9.65	5000	1000
TE-1125	TRO/TRC-1125	1.221	31.00	1.270	32.25	.380	9.65	2500	500
TE-1187	TRO/TRC-1187	1.293	32.83	1.350	34.28	.380	9.65	2500	500
TE-1250	TRO/TRC-1250	1.373	34.86	1.420	36.05	.380	9.65	2250	450
TE-1375	TRO/TRC-1375	1.448	36.76	1.500	38.09	.380	9.65	2000	400
TE-1500	TRO/TRC-1500	1.657	42.07	1.720	43.67	.440	11.17	1500	300
TE-1625	TRO/TRC-1625	1.724	43.77	1.780	45.19	.440	11.17	1500	300
TE-1750	TRO/TRC-1750	1.834	46.57	1.890	47.99	.440	11.17	1250	250
TE-1875	TRO/TRC-1875	1.975	50.15	2.080	52.81	.440	11.17	1000	200
TE-2000	TRO/TRC-2000	2.085	52.94	2.190	55.60	.440	11.17	1000	200
TE-2250	TRO/TRC-2250	2.329	59.13	2.440	61.95	.500	12.70	750	150
TE-2500	TRO/TRC-2500	2.580	65.51	2.700	68.55	.500	12.70	650	130
TE-2625	TRO/TRC-2625	2.720	69.06	2.840	72.11	.500	12.70	600	120
TE-2750	TRO/TRC-2750	2.800	71.09	2.920	74.14	.500	12.70	600	120
TE-3000	TRO/TRC-3000	3.095	78.58	3.220	81.76	.500	12.70	500	100
TE-3500	TRO/TRC-3500	3.585	91.02	3.700	93.94	.560	14.22	350	70



Material: Low-Density Polyethylene **Color*:** Black

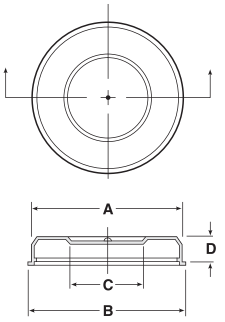
Series TE End Plugs have been designed to fit Caplugs' ClearView® line of plastic tubing. The TE Series fits securely into our tubing to create attractive and unique packaging. While this series was developed for our tubing, its versatile design makes it ideal for a variety of packaging applications.

IMSG

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Tubing & Packaging - Tube Ends

STP SERIES Shallow Tube Plugs For Packaging Tubes



Caplug No.	DIMENSIONS										Packaging	
	Nominal Tube I.D.		A		B		C		D		Carton Quant.	Mini Pak Quant.
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
STP-1-1/2	1.5	38.10	1.520	38.61	1.62	41.15	1.00	25.40	.46	11.68	2500	500
STP-1-3/4	1.75	44.45	1.770	44.96	1.87	47.50	1.00	25.40	.46	11.68	2500	500
STP-2	2	50.80	2.025	51.56	2.12	53.85	1.50	38.10	.46	11.68	1000	200
PP-2250	2.25	57.15	2.258	57.35	2.36	59.89	–	–	.43	10.92	2400	n/a
STP-2-1/2	2.5	63.50	2.530	64.26	2.63	66.80	1.50	38.10	.46	11.68	1000	200
PP-2750	2.75	69.85	2.750	69.85	2.89	73.41	–	–	.43	10.92	1300	260
PP-3	3	76.20	3.030	76.96	3.16	80.26	–	–	.48	12.19	1200	n/a
STP-2-3/4	2.75	69.85	2.780	70.61	2.88	73.15	1.50	38.10	.46	11.68	1000	200
STP-3	3	76.20	3.030	76.97	3.16	80.27	2.00	50.80	.46	11.68	750	150
STP-3-TRI**	3	76.20	3.030	76.97	4.17	105.92	2.00	50.80	.50	12.70	400	80
STP-3-1/4	3.25	82.55	3.280	83.32	3.41	86.62	2.00	50.80	.46	11.68	500	100
PP-3500	3.5	88.90	3.505	89.03	3.61	91.57	–	–	.48	12.19	800	n/a
STP-4	4	101.60	4.030	102.87	4.17	105.92	2.00	50.80	.45	11.43	500	100
STP-5	5	127.01	5.035	128.02	5.18	131.58	3.00	76.20	.48	12.19	250	50
STP-6	6	152.41	6.042	153.42	6.19	157.23	3.50	88.90	.48	12.19	100	20
STP-6-1/16	6.06	153.93	6.105	155.20	6.26	159.01	3.50	88.90	.57	14.48	100	20
PP-8	8	203.20	8.025	203.84	8.23	208.92	–	–	.50	12.70	200	n/a

**** Anti-roll design**

Material: Low-Density Polyethylene **Color*:** White

Series STP Shallow Tube Plugs are an ideal closure for container tubes used for packaging, shipping or mailing. They are designed to fit snugly in the tube end. The narrow flange ensures that there is no over-hanging projection to catch on other tubes.

ISO 9001:2000 Certified
CERTIFICATE # 08-511

Contact your Customer Service Representative
to request our Industrial Rubber Products Catalog.

1549 Simpson Way • Escondido, CA 92029
800.696.7826 or 760.489.8745 • Fax: 760.489.9117

sales@estcoenterprises.com